1.

G 12 FOCUS :

1) MAKE FINAL SETTING WITH RED NOS. DECREASING

2) FOR CENTRE TO VIOLET, CORRECT BY INCREASING RED NOS.

3) DECREASING TEMP. CAUSES C. TO VIOLET

4) .50 DIV. = 21 MICRONS ON FOCUS PLATE

= MOVEMENT OF CAMERA 6×10^{3} IN.

TYPICAL FOCUS : 90R (WINTER)
5R (SUMMER

3.

Dome Temp. .....

Focus .....

Dome Temp. .....

Hour Angle End	D

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
						DAVID DUNLAP OBSERVATORY			
						74" LOGBOOK			
						VOL. 43			
						PLATE NOS 34451- 35715			
						MAY 1971- JUNE 1972			

5

Many Visitors till $11^h 50^m$!

GH- GL 83- 75

Date MAY 8/9 SAT/SUN **Observer** DY/TM **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34451	HD153720	16^h 56.0	+75 34	G12	IIa-O	13/0.5	52°F	23^h01	00^h13	A	1^h53E
34452	HD 154528	17 00.9	+77 48	"	"	"		00^h 20^m	01 02	B	1^h08E
~~34453~~	~~AC Her~~	~~18 26.0~~	~~+21 47.9~~	~~"~~	~~"~~	~~13/.3~~		~~01^h 21~~		~~A~~	
34453	R Sct	18 42.1	-05 48.8	"	"	13/.3	52°F	01 36	02 06	B	1^h50E
34454	HD 187459	19 45.0	+33 11	"	"	13/.5		02 13	02:53	A	02 06E
34455	HD 192276	20 09.0	+47 26	"	"	13/.5		02 56	03:38	B	01 44E
34456	HD 191610	20 05.7	+36 33	"	"	13/.5		03 42	03:52	A	01 27E
34457	HD 186791	19 41.5	+10 22	"	"	"	50°F	03:57	04:07	B	00 49E

Dome Temp. 48°F H=74%
Focus 40R ~~5-R~~
Dome Temp. 46°F H=78%

Transparency Conditions Excellent
Cirrus in SW.

ing Time S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
13	A	1h53 E	+75 30	2"-3"	6.84	F0	6-6-6	Gz/Sp Bi	400/260		sl. wk
02	B	1h08 E	+47 45	"	6.66	A0	6-6-6	"	400/200		(Guiding) wk
	A	~~+21 55~~			~~7.4-9.6~~	~~F2-K4~~	~~6-~~	~~RV Tau~~	~~800/~~	too faint →	
06	B	1h50 E	-5° 40'	2-3"	6.3-6.6	G0-K0	6-6-6	RV Tau	400/180		v. sl. wk
53	A	02 06 E	+33 27	2"	6.46	B0.5	6-6-6	Bin: Sp Bi	200/100		(Guiding) FINE
38	B	01 44 E	+47 43	"	6.6	B2 V	6-6-6	Gz: Sp-Bin	200/100		(Guiding) FINE
52	A	01 27 E	+36 50	"	4.82	B3 Ve	6-6-6	Sp Bin-Bin	200/100		
07	B	00 49 E	+10 37	2"-3"	4.15	K3 II	6-6-6	Std Vel	40/30		FINE

7.

Date 10/11 May '71 Mon/Tue **Observer** Blu-Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34458	HD 77309	08h 56m.7	+54° 41'	6-12	IIa-O	13/.5	64°F	20:14	20:26	A	02 18 W
34459	HD 93702	10 44.0	+11 04	"	"	"		20:28	20:40	B	00 46 W
34460	HD 104451	11 56.6	+30 06	"	"	13/.3	63°F	20:43	23:13	A	02 08 W
34461	HD 103483	11 49.9	+47 02	"	"	13/.5		23:18	23:56	B	02 59 W
34462	HD 107325	12 15.3	+27 11	"	"	13/.3	61°F	00:01	00:23	A	03 00 W
34463	HD 130841	14 45.4	-15 38	"	"	13/.5	"	00:28	00:30	B	00 37 W
34464	HD 134646	15 05.9	+63 30	"	"	"		00:36	01:22	A	01 10 W
34465	HD 124675	14 09.9	+52 15	"	"	"		01:25	01:28	B	02 13 W
34466	HD 124897	14 11.1	+19 42	"	"	"		01:36	01:37	A	02 19 W
34467	HD 130109	14 41.2	+2 19	"	"	"		01:43	01:47	B	02 00 W
34468	HD 141458	15 44.1	+13 01	"	"	"	60°F	01:51	02:25	A	01 34 W
34469	32 Ser	15 44.4	-3 07	"	"	"		02:29	02:32	B	01 41 W
34470	HD 152614	16 49.3	+10 20	"	"	"		02:35	02:39	A	00 44 W
34471	HD 161868	17 42.9	+2 45	"	"	"		02:42	02:46	B	00 05 E
34472	HD 164577	17 56.7	+1 18	"	"	"		02:47	02:53	A	00 11 E
34473	HD 159026	17 27.3	+38 57	"	"	"		02:56	03:28	B	00 55 W

Dome Temp.
Focus
Dome Temp.

Dome Temp. 53° 50%

Focus .....

Dome Temp. .....

Transparency Conditions Excellent – some grd. haze

8.

g Time S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
6	A	02 18 W	54 28	1"-2"	5.64	A2m	6-6-6	Sp. Bin-Bln	200/100		FINE
0	B	00 46 W	+10 48	2	5.29	A2V	6-6-6	"	200/100		FINE
3	A	02 08 W	+29 48	1"-3"	V= 8.4	gF3	6-6-6	"	400/160		SC. WK
56	B	02 59 W	+46 44	2"-3"	6.46	A0	6-6-6	"	400/200		(GUIDING) SC. WK.
23	A	03 00 W	+26 52	2-3	V= 5.47	gK2	6-6-6	"	400/200		FINE
30	B	00 37 W	-15 49	2"	2.79	Am	10-10	"	40/19		(GUIDING) FINE
22	A	01 10 W	+63 15	1-2	V= 6.75	F2	6-6-6	"	400/160		(GUIDING) SC. WK
8	B	02 13 W	+52 00	2	4.74	A7IV	10-10	"	40/18		FINE
7	A	02 19 W	+19 25	2	1.30	K2IIIp	10-10	RV Std	40/29		SC. STR
7	B	02 00 W	—	2	3.74	A0V	10-10	Sp Bin-Bln	40/18		FINE
5	A	01 34 W	+12 55	1"-2"	6.80	A0	6-6-6	"	400/200		(GUIDING) FINE
32	B	01 41 W	-3° 16'	"	3.50	A0V	10-10	"	40/18		FINE
39	A	00 44 W	~~+2 17~~	"	4.30	B8V	6-6-6	"	40/19		FINE
46	B	00 05 E	+2 47	"	3.79	A0V	10-6-3	"	40/18		FINE
53	A	00 11 E	+1 23	"	4.46	A1V	10-10	"	40/18		(GUIDING) FINE
8	B	00 55 W	+38 59	"	V= 6.35	F2m	6-6-	"	400/260		FINE

a.

Date May 11 /71 Cont **Observer** Bln-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34474	HD 187459	19 45.0	+33 11	G12	IIaO	13/15		03:32	03:56	A
34475	HD191616	20 05.7	+36 33	"	"	"		03:58	04:02	B
34476	54 Cyg	20 43.5	+36 07	"	"	"	59°F	04:05	04:09	A
34476F	Focus			"	"	13	"			B
34476T1	Calibration	step wedge	for	plates	34458–34466			May 11/71		
34476T2	"	"	"	"	"	34467–34476		"		

Dome Temp.
Focus
Dome Temp.

Hour Angle End

0055E

0109E

01 40E
~~02 20E~~

MWP

"

Dome Temp. .....

Transparency Conditions .....

Focus .....

Dome Temp. 50°F H=52%

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
56	A	00 55 E	+33 25	2"	6.66	B0.5Ib	6-6-6	Sp Bin-Bin	400/200		FINE
02	B	01 09 E	+36 51	"	4.82	B5Ve	10-10	"	40/18		FINE
09	A	01 40 E ~~02 30 W~~	+36 28	"	4.42	B5 V	10-10	"	40/18		(GUIDING) FINE
	B						3/3	no filter			GOOD
		MWP-2 @ 68°F for 9 min									
		" " "									

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Date WED/THUR MAY 12/13 1971 **Observer** Gt - Tm **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34477	176318	18 54.6	18 07	G12	IIaO	9/017		01 :03 (86)	02:29	A	01'22E

Dome Temp. 40°F H=57%

Transparency Conditions POOR

12

Focus

Dome Temp. 40°F H=60%

Time .T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
29	A	01:22E	+38 20	~10"	5.7	B6-7	6-6-6	SPEC BIN.	400/254	cloud -	FINE (+FOG)

Date THUR/FRI 13/14 MAY '71 **Observer** Blu-Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34478	HD93702	10 44.0	+11 04	G-12	IIa-O	13/.5		20:19	20:35	A	0055W
34479	HD110411	12 36.8	+10 47	"	"	"	52°F	20:39	20:55	B	0037E
34480	HD77309	08 56.7	+54 41	"	"	"		21:03	21:25	A	0330W
34481	HD103483	11 49.9	+47 02	"	"	"		21:28	22:04	B	0117W
34482	HD104471	11 56.6	+30 06	"	"	20/.3	51°F	22:09	23:57	A	0305W
34483	HD107325	12 15.3	+27 11	"	"	13/.3		00:01	00:21	B	0310W
34484	HD130841	14 45.3	-15 38	"	"	13/.5		00:24	00:26	A	0045W
34485	HD130109	14 41.2	+2 19	"	"	"		00:29	00:32	B	[illegible]
34486	HD124897	14 11.1	+19 42	"	"	"		00:36	00:37	A	[illegible]
34487	HD124675	14 09.9	+52 15	"	"	"		00:42	00:48	B	0144W
34488	HD134646	15 05.9	+63 30	"	"	"		00:53	02:[illegible]	A	[illegible]
34489	HD141458	15 44.1	+13 01	"	"	"		02:34	03:28	B	0250W
34490	HD152614	16 49.3	+10 20	"	"	"		03:31	03:37	A	[illegible]
34491	HD167965	18 12.5	+42 08	"	"	"		03:40	03:5[illegible]	B	0046W
34492	HD191610	20 05.7	+36 33	"	"	"		03:54	04:00	A	0100E
34493	HD198183	20 42.5	+36 07	"	"	"	45°F	04:02	04:06	B	[illegible]

Dome Temp. 49° H = 59%

Focus

Dome Temp. 39°F H: 69%

Transparency Conditions Fair-Poor / Excellent after 22:00

Funny satelite - 2:30 - 2:40
big dipper = α Boo

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Time T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
35	E	00 55W	+10 46	3	5.29	A2V	6-6-6	Sp. Bin-Bln	200/100		FINE
55	E	0037E	+10 27	"	4.97	A1V	6-6-6	"	80/38	some cloud	(GUIDING) FINE
35	H	0330W	+54 26	"	5.64	A2n	6-6-6	"	200/100	"	FINE
04	E	0117W	+46 41	2"	6.46	A0	6-6-6	"	400/200		FINE
57	A	0305W	+29 44	3	8.7	gF3	6-6-6	"	800/300	new plate	V.SL. W'K
21	B	0310W	+26 51	3	V= 5.47	gK2	6-6-6	"	400/200		V.SL. W'K
6	A	0045W	-15 54	2-3"	2.89	Am	10-10	"	40/19		FINE
2		0056W	+2 05	2	3.74	A0V	10-10	"	40/18		FINE
7	A	0132W	+19 24	2	1.30	K2III	10-10	RV Std.	40/25		FINE
8	1	0144W	+52 00	3	4.74	A7IV	10-10	Sp Bin-Bln	40/18		FINE
	A	02 5[illegible]W	+63 1[illegible]	3-5	V= 6.75	F2	6-6-6	"	400/[illegible]		FINE
8	B	0250W	+12 52	3-8	6.80	A0	6-6-6	"	400/200		FINE
7	A	01 54W	+10 16	4	4.30	[illegible]V	6-6-6	"	40/18	(GUIDING)	FINE
	A	00 [illegible]W	+42 12	3-4"	5.51	[illegible]	6-6-6	"	200/100		FINE
	A	0100E	+36 48	2-4"	4.32	[illegible]	10-10	"	40/18		FINE
6	B	01 30E	+36 26	4	4.42	[illegible]V	10-10	"	40/18		FINE

15 #1 (# IIaO - Old 16hr baked)

Date Fri-Sat 14/15 May 71 **Observer** GI-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34494	HD 78316 (κ Cnc)	9h 02.3m	+11° 04'	G12	IIaO	9/.5		20:19	20:35	A	0h 40W
34495	HD 77350 (γ Cnc)	8h 56.9m	+24° 51'	"	"	"	53°F	20:40	21:00	B	0h 04W
34496	HD 87737 (η Leo)	10h 01.9m	+17° 15'	"	"	"		21:02	21:06	A	02 11W
34497	HD 114330 (ι Vir)	13h 04.8m	-5° 00'	"	"	"		21:10	21:20	B	[illegible]
34498	HD 118022 (η Vir)	13h 29.0m	+4° 10'	"	"	"		21:25	21:39	A	0042E
34499	HD 118216	13 30.3	+37 42'	"	"	"		21:43	22:01	B	0021E
34500	HD 137909	15 23.7	+29 27	"	"	"	53°F	22:05	22:09	A	0h 03E
34501	HD 145389	16 05.6	+45 12	"	"	"		22:14	22:20	B	0236E
34502	HD 144287	16 00.0	+25 30	"	*	13/.3		22:26	23:16	A	0135E
34503	HD 145457	16 06.0	+27 01	"	*	"		23:18	23:46	B	[illegible]
34504	HD 154512	17 00.8	+28 04	"	*	13/.3		23:55	00:51	A	[illegible]
34505 <	HD 169169	18 18.3	+14 57	"	*	13/.5	49°F	00:57	01:57	A	[illegible]
34506	HD 196502	20 32.8	+79 37	"	IIaO cut	9/.5		02:09	02:23	B	0256E
34507	HD 207260	21 42.5	+60 40	"	IIaO	"		02:30	02:38	A	0359E
34508	HD 202550	21 13.5	+38 59	"	"	"	48°F	2:46	02:52	B	0311E
34509	HD 201601	21 05.5	+9 44	"	" cut	"		02:59	03:15	A	0241E

Dome Temp.
Focus
Dome Temp.

Dome Temp. 47°F H: 52%

Transparency Conditions Excellent

Focus

Dome Temp.

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]	A	02h 40W	+10 53	2"	5.24	B8p	6-6-6	Gl Apsm	200/100		FINE
00	B	03h 09W	+24° 39'	"	5.46	B9p	6-6-6	"	200/100		FINE
06	A	02 11W	+16° 59'	"	3.48	A0I	10-10	"	40/18		FINE
[illegible]	A	00h 37E	-5° 18'	"	4.37	A1II	6-6-6	"	200/97		FINE
39	A	0042E	+3° 52'	"	4.94	A2p	6-6-6	"	200/100		FINE
01	B	0021E	+37 23	1"-2"	4.95	F2IV	10-10	"	200/130		FINE
19	A	02h 06E	+29 15	"	3.66	F0p	10-10	"	40/24		FINE
20	B	0236E	+45° 04'	2"	4.24	B9p	10-10	"	40/18		FINE
16	A	0135E	+25° 23'	"	8.24	G8V	3-3-3 3-3-3	S S V	800/350	very fast	FINE
[illegible]	B	01h 11m E	+26 52	1"-2"	8.14	K0III	3-3-3 3-3-3	"	800/350	" [illegible]	FINE
[illegible]	B	01h 01m E	+28 11	1"-2"	8.59	K1III	3-3-3 3-3-3	"	800/350	"	V. SL. WK
[illegible]	A	01h 12m E	+15° 03'	"	7.40	A2p	6-6-6	Gl Apsm	400/200		MISSING
03	B	0256E	+74 55	2"-3"	5.19	A0p	6-6-6	"	200/100		FINE
38	A	0353E	+61° 02'	1"	4.28	A2I	10-10	"	40/18	[illegible]	V. SL. WK
52	B	0311E	+39° 17'	"	4.24	B9I	10-10	"	40/18		FINE
15	A	0241E	+100 04'	"	4.64	F0p	10-	"	40/24		FINE

17 #2

Date Sat May 15/71 cont **Observer** G.L.-T. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34510	HD 210424	22 05.3	-12° 03′	G12	IIaO	9/1.5	47°F	03:19	03:56	E

Dome Temp. .....

Transparency Conditions .....

Focus .....

Dome Temp. 41°F H. 55%

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
6	R	03h00m E	-11°38'	2"-3"	5.46	B6 III	6-2-6	G1-Apstn	200/90		Transparency issue

19

Public night Hrs-61
74 — 59

* baked plates

Date May 15/16 1971 **Observer** MCU - Jm **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34511	HD 154528	1700.9	+77 48	G12	IIaO*	131.5	57°F	22:45	01:19	A

Dome Temp. 50°F H=62%

Focus

Dome Temp. 48°F H=65%

Transparency Conditions Poor
Haze & Cloud

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
19	h	0022E	+77 44	2"-3"	6.66	A0	6-6-6	Spbin-62	400/180	cloud	FINE

* baked 2a0 - 16hr

Date May 16/17 Summer **Observer** McH - Jn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34512	HD 88476	10 07.1	+28 44	512	2a0*	13/3	61°F	20:24	21:12	A	02 21W
34513	HD 101906	11 38.6	+24 33	"	"	"	60°F	21:16	22:36	B	02 13W
34514	HD 144287	16 00.0	+25 30	"	"	"	60°F	22:41	23:41	A	01 31W
34515	HD 153720	16 56.0	-[illegible] 26	"	"	13/.5	57°F	23 50	00:48	B	00 47E
34516	HD 176318	18 54.6	+38 07	"	"	9/.7	[illegible]	01:53	01:27	A	02 [illegible]
34517	HD 166842	18 07.4	+25 32	"	"	13/.3	57°F	01 37	02:37	B	00 13E
34518	HD 171550	18 30.4	+29 40	"	"	"	56°F	02 40	03:50	A	00 36W
34519	β Oph	17 38.5	+4 37	"	"	13/.5	55°F	03 53	03 57	B	01 36W
34519 F1	Focus	Test		"	"	13				B	

Dome Temp. 54°F H=51%

Focus

Dome Temp. 47°F H=50%

Transparency Conditions Excellent

Good Aurora

Time E.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2	A	02 21W	+28° 27′	1″	8.14	G8 III	3-3-3 3-3-3	5 5 V	800/300		FINE
6	B	02 13W	+24° 15′	1-2″	8.24	G2 V	3-3-3 3-3-3	"	800/300		FINE
4	A	01 01E	+25° 23′	2″	8.24	G8 V	3-3-3 3-3-3	"	800/300		FINE
4	B	00 47E	+75° 30′	2-3″	6.34	F0	6-6-6	G7 SPEC. BIN.	400/200		FINE
7	-	02 09E	+33° 17′	"	5.7	B6-7	6-6-6	"	400/280		~~FI~~ STR
7	B	00 13E	+25° 36′	"	8.14	K1 III	3-3-3 3-3-3	5 5 V	800/300		FINE
0	A	00 36W	+29 47	"	8.00	K0 III	3-3-3 3-3-3	"	800/340		FINE
7		01 36W	+04 39	3″	3.93	K2 III	10-10	std vel	40/25		FINE
		[illegible]	[illegible]	[illegible]			3/3	[illegible]			GOOD
										HIGH BACKGROUND	
										FOG ON ALL THESE	
										PLATES	

21

Date Mon-Tue 17/18 May 1971 **Observer** Bln-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34520	HD93702	$10^h\ 44^m.0$	+ 11° 04	G-12	IIa-O	13/.5		20:16	20:26	B
34521	HD77309	08 56.7	+ 54 41	"	"	"	63°F	20:30	20:46	A
34522	HD103483	11 49.9	+ 47 02	"	"	"		20:49	21:29	B
34523	HD110411	12 36.8	+ 10 47	"	"	13/.5		21:32	21:42	[illegible]
34524	HD130109	14 41.2	+ 2 19	"	"	"		21:45	22:15	E
34525	HD107325	12 15.3	+ 27 11	"	"	13/.3	63°F	22:20	22:40	A
34526	HD124997	14 11.1	+ 19 42	"	"	13/.5		22:43	22:44	[illegible]
34527	HD130841	14 45.3	− 15 38	"	"	"		22:47	22:51	A
34528	HD124675	14 09.9	+ 52 15	"	"	13/.5		22:57	23:03	B
34529	HD134646	15 05.9	+ 63 30	"	"	"	62°F	23:06	[illegible]	A
34529 F1	Focus			"	"	13	"			B
34529 F2	"			"	"	13	"			C
34129 T1	calibration strip cuvette, plate, 34120 - 34129								[illegible]	T1

Dome Temp. 56° 70%
Focus 5-R 40-R
Dome Temp. 53° 55%

Transparency Conditions Fair - lots of Cirrus and cirrostratus around

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		01h 03m W	+10° 48'	2	5.29	A2V	6-6-6	Sp. Bin-Bln	200/100		FINE
		03 07W	+54 29	2	5.64	A2n	6-6-6	"	200/100		FINE
		01 00W	+46 41	2"-3"	6.46	A0	6-6-6	"	400/200	Clouds moving in at 21:10	(GUIDING) FINE
		00 25W	+10 27	2	4.97	A1V	6-6-6	"	80/36		FINE
		01 07E	+2 03	"	3.74	A0V	6-6-6	"	80/40	Cloud	FINE
		01 44W	+26 54	1-2	V= 5.47	gK2	6-6-6	"	400/200		FINE
		00 07E	+19 25	2	1.30	K2III	10-10	R V • Std	40/25		STRONG
		00 35E	—	2	2.89	Am	10-10	Sp. Bin-Bln	40/20		(GUIDING) FINE
		00 12W	+52 00	1-2	4.74	A7IV	6-6-6	"	40/19		FINE
		00 50W	+53 17	"	V= 6.75	F2	6-6-6	"	400/170	Cloud at 23:30 Cut short - over develop plate	(GUIDING) SL. WK + VERY SLIGHT CENTRE TO R
							3/3	no filter		Closed 02h	
	C		"				"	"			VERY SLIGHT CENTRE TO WEST, IN THE RED
		2 WP 2/9.0 mi @			68°F						

23

Date Tues-Wed 18/19 May 71 **Observer** Th **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34530	89 Her	17 51.4	+26 04	G12	D a O	13/5		00 42		A

Dome Temp. 70°F H=65%

Transparency Conditions Very Hazy

Focus

Dome Temp.

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A			~~2'4"~~	~~5.48~~	~~F5p~~	~~6=~~	~~G1001~~	~~400/~~	Forget it	
										Will this sky ever	
										make up its mind?	
										JIM: IT'S PROBABLY	
										OK TO BE BACK TO	
										USING H.H.C.	
										ALSO, THE SHORT	
										UNEXP. PLATES ARE	
										OK	
										FOCUS CHANGED	
										TO 20 R	

Date Wed/Thur 19/20 May 71 **Observer** Gl-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34530	HD 93702	$10^h 44^m.0$	+11° 04'	G12	IIaD	13/.5	75°F	20:38	21:30	A
34530F1	focus test on [illegible]					9	73°F			B

Dome Temp. 65°F / 62% H

Focus 2.0 - R

Dome Temp.

Transparency Conditions hazy
bad seeing

2

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2415W	+10° 48'	4-5	5.25	A2V	6-6-6	Sp. Bin-Bin	200/70	clouds	WEAK
					3-3	no fitting			~~[illegible]~~
									BLANK

27

Date Thur/Fri: 20/21 May '71 **Observer** Blum-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34531	HD130841	14 45.4	-15 38	G-12	IIa-O	13/.5	6°F	00:19	00:25	A
34532	HD130109	14 41.2	+2 19	"	"	"		00:27	00:35	B
34533	HD 103493	11 49.9	+47 02	"	"	"		00:40	02:00	C
34534	HD124675	14 09.9	+52 15	"	"	"		02:05	02:15	A
34535	HD141457	15 44.1	+13 01	"	"	"		02:18	03:16	B
34536	HD152614	16 49.3	+10 20	"	"	"		03:18	03:27	C
~~34537~~	~~HD170073~~	~~18 22.5~~	~~+56 45~~	~~"~~	~~"~~	~~"~~		~~03:29~~	~~03:41~~	~~A~~
34538/37	HD191610	20 05.7	+36 33	"	"	"		03:44	03:57	B
34538 37F	focus test	out and/in		"	"	9	58°F			B
34537 71	calibration	stop cooling, go later			34530-34537				21 May 71	

Dome Temp. 54° H=52%

Focus .....

Dome Temp. 50° H=59%

Transparency Conditions Clouds at start - but clearing
Excellent at end

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01h 12m W	-15° 51'	2-3	2.89	A m	6-6-6	Sp. Bin - Blu	40/18		FINE
01 27W	+ 2 06	3	3.74	A0V	6-6-6	"	40/18	Cloud	FINE
01 43W	+ 46 44	5-10	6.46	A0	6-6-6	"	400/175		FINE 26.4%
01 37W	+ 52 00	3-4	4.74	A7IV	6-6-6	"	40/19		FINE
01 30W	+ 12 53	2-3	6.80	A0	6-6-6	"	400/200		FINE
02 07W	+ 10 17	"	4.50	B8V	6-6-6	"	40/18		FINE
~~00 [illegible]W~~	~~+ 58 47~~	~~3~~	~~4.96~~	~~A1V~~	~~6-6-6~~	~~"~~	40/18	Broken discarded New Plate Box	
00 38E 01 [illegible]	+ 36 49	"	4.82	B3Ie	6-6-6	"	40/18	* turn heater to clock drive off	FINE
					3-3	no filter		* Remaining plates in Box # May be fogged. Test plate (unexp.) placed in exp. plate	GOOD
2m CWP-2	9.0 min	@ 68°F / 20°C			1 sec				↓ TEST PLATE

29

Date Fri Sat May 21-22 1971 **Observer** Rm - R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34538	Y Oph HD 162714	17h 17.3	-06° 07.2	G-12	IIaO	13/.3	54°F	00:18	2h 23	B
34539	U Vul HD 185059	19h 32.2	+20° 06.6	G-12	IIaO	13/.3		02:28	3h 13	A
34540	R Sct	18 42.1	-05° 48.8	G-12	IIaO	13/L	52	03:19	4h 06	B

Dome Temp. 50°F 59%

Transparency Conditions clouds clearing after 00:00

Focus

Dome Temp. 44°F 65%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
5h 11 W	-06° 04'	3	7.01–7.53	F8Ib–G2Ib	3-3-3 3-3-3	Cepheid/EGAS	500/300	Clouds, only good 1st plate discarded; Slit opened .35 9/5 counting too slowly?	WEAK
04h42 E	+20° 21	3	7.8–9.0	F2–K0	3 15	Cepheid/EGAS	500/54	too slow without slit	~BLANK
04h00 W	-05° 40	3	6.3–8.6	G0–K0	6-6	RV Tau/D. Pauj	400/200		WEAK

Date 22/23 May '71 Sat/Sun **Observer** Blm - R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34541	HD93702	10 44.0	+11 04	G-12	IIa-O	13/.5	55°F	20:22	20:34	A
34542	HD77309	08h 56m.7	+54° 41'	G-12	IIa O	13/.5		20:40	21:00	B
34543	HD103483	11h 49m 54s	+47° 02'	G-12	IIa O	13/.5		21:04	21:39	C
34544	HD104451	11 56.6	+30° 06	G-12	IIa O	20/.3		21:43	00:03	[illegible]
34545	HD107325	12 15.3	+22 11	G-12	IIa-O	13/.3		00:07	00:44	[illegible]
34546	HD141458	15 44.1	+13° 01	G-12	IIa-O	13/.5		00:48	01:30	C
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20/.3		01:36	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	IIa O	13/.3		03:00	[illegible]	[illegible]

Dome Temp. 55°F H=53% **Transparency Conditions** Excellent - good

Focus .....

Dome Temp. 45°F 58%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 43 30 W	+10° 43'	2	5.29	A2V	6-6-6	Sp. Bin-Bin	200/100		FINE
03 41 W	+54° 30	2-3	5.64	A2n	6-6-6	" "	200/100		FINE ~~SL. WK~~
01 [illegible] W	+46 42	2	6.46	A0	6-6-6	"	400/200		SL. WK
03 [illegible]	+29° 46	2	8.7	gF3	6-6-6	"	800/320	Very [illegible] 44 62. Ecl.?	SL. WK
04 10 W	+26°56	2-3	V= 5.47	gK2	6-6-6	"	400/200	new book II	SL. WK
01 27 W ~~01 37 W~~	+19°54	2	6.80	A0	6-6-6	"	400/175		V. SL. WK
[illegible]	[illegible]	2	[illegible]	[illegible]	6-3-6	[illegible]	[illegible]		SL. WK
[illegible]	[illegible]	2	[illegible]	[illegible]	6-6	[illegible]	[illegible]		VERY WEAK

Date 23/24 May Sun Mon **Observer** McU - Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34549	HD 84441	09h 40m.2	+24° 14'	G-12	IIaD6	13/0.5	61°F	21 23	21 26	A
34550	HD 105595	12 06 2	+25 19	G-12	"	12/0.3	59°F	21 30	21 52	B
34550F1	[illegible]	[illegible]		G-12	"	9	58°F			B
T1										A
T2										C
		T1 & T2 on that plate looking for [illegible]								
		T1) 10 minutes [illegible] light [illegible]								
		T2) 15 minutes all dome lights on (telescope [illegible])								
	HD 144217	16h 04m.3	-23° 30'	G-12	IIaD	3/0.5		22 21		A
34550 T3	calibration	step wedge for plates 34538 - 34548							25 May 1971	

Dome Temp. 52°F/51% = RH

Transparency Conditions clear with clouds in the far N.W.

Focus

Dome Temp. 50°F/57%

34

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 38N	+24 00	2	3.76	0 OII	6-6-6	STD VEL	40/26		FINE
01 28N	+25 00	2-3	3.9	0 OII	3-3-3 3-6	SSV	200/210	checked out	FINE
					3-3	no filter			GOOD
									BOTH PLATES SHOW NO FOG
[illegible] focusing:						Carson - please [illegible] TI & R as strongest point			
[illegible]	[illegible]	[illegible]	3.24					clouds came in again no guide up.	
mwr-2/9.0 min @ 68°F/2400c, 1.0									
flats 34549-34550 T = 15 min @ 68°F									
Monos Tus. New grating installed for G12 (should be same dispersion) Also capper and grating cover synchronized.									

Date May 26 **Observer** **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34550 F2	Focus	Plate		G12	IIaO	13	51°F			B
34550 F3	"	"		"	"	13				B

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
							3/3	no filter		(SL. STR.)	SL. [illegible] to [illegible]
							6/6	"		(STR.)	

37

Date May 28-29 Fri-Sat **Observer** Dinur/ Tan Rm **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34551	HD 153720	16h 56m.0	+75° 34'	G12	IIAo	13/5	61°F	20h 50	21:38	A	02:16E
34552	HD 154528	17 00.9	+77 48	"	"	"		21:54	22:18	B	02:58
34553	HD 144287	16 00.0	25 30	"	"	13/3	59°F	22:45	23:50	C	00:50
34554	Y Oph = HD 161719	17h 47.3	-26° 05.2	"	"	13/3		00h 13	00:47	A	00:55E
34555	HD 185059	19 32.3	+20 07	"	"	"	57°F	00h 53	01:25	B	01:35
34556	R Sct =	18 42.1	-5 49	"	"	13/5		02:37	03:07	A	03:34
34557	5 Sge = HD 187372	19 52.0	+16 22	"	"	13/5	55°F	03:13	03:43	C	04:02E
34557 T1	Calibration step wedge for plates 34551-57							May 29/70			

Dome Temp. 52°F H=52%

Focus

Dome Temp. 50°F H 52%

Transparency Conditions Good - Excellent

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
8	A	0310E	+75° 28′	1"-2"	6.84	F0	4-4-4	Sp-Bin-G2	400/200		Fine [illegible]
8	B	0235E	+77° 44	"	6.66	A0	4-4-4	"	400/140		Fine
"	C	0005E	+25° 23′	"	8.24	G8V	4-4-4	S SV	800/300		Fine
7	A	0055E	-6° 03′	2"-3"	7.[illegible]-7.53	F[illegible]0-G[illegible]0	4-4-4	Cepheid [illegible]	[illegible]/300		Fine
5	B	0103E	+20° 22′	2"	7.8-9.0	F8-K0	4-4-4	"	800/300		[illegible]
7	A	0030W	-5° 46′	3"	6.3-8.6	G0-K0	4-4-4	RV Tau	400/220		Fine
3	C	0003E	+16 39	"	5.87-7.62	F6.6-G5.6	4-4-4	Cephad-Evans	400/210		Fine fog
10		MWF-2/90min @ 68°F									

Visitors until 12 EDT

Date May 29/20 Sat-Sun **Observer** Dy / Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34558	AC 1506	19 26.0	+21 48	G12	IIa-O	13/3	62°F	23h 25	01:01	A	01 14
34559	R Sct	18 42.1	-05 49	"	"	"	"	01 02	01:48	B	01 4
34560	TT Aql	19 03.2	+01 09	"	"	"	60°F	01 54	03:00	C	
34561	HD 209833	22 01.1	+28 28	"	"	9/5	"	03 12	03:32	B	02 26
34562	8 Oph	17 32.5	+4 37	"	"	"		03:34	03:42	C	03
34562 F	Focus Test			"	"	9	60			B	
34562 "	calibration strip exposure for plates 34558 - 34562								31 May 1971		

Dome Tem
Focus
Dome Tem

Dome Temp. 54°F H=50%

Focus

Dome Temp. 51°F H=53%

Transparency Conditions Excellent

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1	A	01 16E	+21 56	2"	7.4-7.6	F2 K4	4-4-4	R Tau	800/350		FINE
2	B	00 45E	-05 38	3"	6.5-8.6	G0-K0	4-4-4	"	400/160		FINE
0		00 05W	+01 21	2.5"	7.20-9.06	F8-K0	4-4-4	Cep Nova 1-Rm	400/175		FINE
2	B	02 20E	+22 55	3"	5.5	A0 V	4-4-4	Sp Bin-GZ	200/80	(GUIDING) J. SL. WK	
1	C	02 12W	+04 40	3.4"	3.93	K2 III	6-	std Vel	40/20		FINE
	D	[illegible]	[illegible]				2/2	no filter			J SL. CENTRE TO RED
		new P 2/	9.0 min @	65°K	/ 2	00c	/ K0				

Date May 30/31 Sun-Mon **Observer** McIl-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34563	HD 5847b	10 07.1	+21 [illegible]	[illegible]	5096	13/0.3	65°F	20 41	22:11	A
34564	HD 145001	16 03.6	+17 19	"	"	13/0.5	65°F	22 21	22:45	B
34565	HD 144287	16 00.0	+25 30	"	"	13/3	65°F	22 47	23:57	C
34566	HD 145457	16 06.0	+27 01	"	"	"	64°F	00 00	00 46	A
34567	HD 154516	17 00.3	+28 14	"	"	"	64°F	00 51	03 19	B
34568	HD 191610	20 05.7	+36 33	"	"	13/1.5		03 23	03 29	C
34569	HD 152614	16 49.3	+10 20	"	"	"		03 33	03 41	A
34569 F	Focus			"	"	13				F
								31 May 1971		

Dome Temp. 60°F H = 56%

Focus

Dome Temp. 52°F H = 70%

Transparency Conditions Scattered cloud but very good

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1	A	04 14W	28 27	2-3"	3.14	G5III	2-2-2 2-2-2	SSV	300/240	Cloud by 23h	FINE
15		01 06E	+17 12	2"	6.1	G4	4-4-4	SN Vel	400/180	Cloud	FINE
23		00 08W	+25 25	2"	8.24	G8V	2-2-2 2-2-2	S SV	800/300		FINE
	A	00 53W	+26 55	2-3"	8.14	K0III	2-2-2 2-2-2	"	800/300		FINE
9	C	02 30W	+28 13	2-4"	8.59	K1III	2-2-2 2-2-2	"	800/300	Windy	* FINE
9	C	00 23E	+36 50	~5"	4.82	K5III	6-6	Spectra-Blue	40/14		SC. STR
1	A	03 03W	+10 19	3-6"	4.30	B6V	6-6	"	40/14		FINE
		[illegible]					2/2	no filter			GOOD
										* FINGERPRINTS, ABRASION MARKS	
		NEW P-2/ 9.0 min @ 60°F									
							Note: I find the Comp. spectra a little weak. I would like to see it about 50% stronger so that λ4602 can be seen. Hd.				

43 PRIMARY REALUMINIZED MAY 31 - JUN 1

Date 1/2 JUNE '71 Tu/Wed **Observer** Blu - Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34570	HD 130841	14 45.4	-15 38	5-12	IIa-O	13/.5		21 41	21 55	A
34571	HD130109	14 41.2	+ 2 19	"	"	"		22 02	22 08	B
34572	HD152614	16 49.3	+ 10 20	"	"	"	62°F	22:14	22:22	C
34573	HD 158857	16 30.9	+ 2 12	"	"	"		22:26	22:32	A
34574	HD161096	17 38.5	+ 4 37	"	"	20/.5		22:38	22:42	B
34575	HD161096	17 38.5	+ 4 37	"	"	25/.5		22:44	22:48	C
34576 *	HD161096	17 38.5	+ 4 37	"	"	30/.5		22:49	22:53	A
34577	HD141456	15 44.1	+ 13 01	"	"	13/.5	59°F	22:56	23:56	B
34577E1	Focus Test			"	"	13	58°F			C

* The focus on this plate is very bad. Nd May 8/75
or there is flexure - maybe because of wide slit
poor lines

Dome Temp. 53°F H: 47%

Focus

Dome Temp. 50°F H: 48%

Transparency Conditions Bottom Spectroscopic's

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 31E	-15° 52'	2-5	2.99	Am	9-5	Sp. Bin-Bin	200/76		V.SL WK
00 09E	+ 2 05	2"-3"	3.74	A0V	7-7	"	200/75		FINE
02 07E	+10° 18'	1"-2"	4.30	B8V	7-7	"	200/76		* FINE
01 34E	+ 2 07	"	3.86	A1V	7-7	"	200/75		* FINE
02 37E	+ 4 40	2"	3.93	K2III	7-7	RV Std Slit Test	200/100		FINE
02 31E	"	"	3.93	K2III	6-6	"	200/100		FINE
02 27E	+ 4 40	"	3.93	K2III	6-6	"	200/103		FINE
00 30W	+ 2 14	2-3	6.30	A0	7-7	Sp. Bin-Bin	400/170	Both Bin + Tu thought that [illegible] but later seemed normal. Eq?	V.SL WK
[illegible]	[illegible]				3/4	[illegible]	[illegible]		GOOD
								* WEAK COMP.	

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Date 3/4 JUNE '71 Thur/Fri **Observer** Bln-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
34578	HD93702	10^h $44^m.0$	+11° 04′	6-12	IIa-O	13/1.5	63°F	20:39	20:51	A	02 30
34579	HD104451	11 56.6	+30 06	"	"	20/1.3		22:58	22:32	B	03 02
34580	HD103472	11 49.9	+40 02	"	"	13/1.5		23:35	23:01	C	[illegible]
34581	HD124675	14 09.9	+52 16	"	"	"		23:05	23:09	A	[illegible]
34582	HD130841	14 45.3	−15 38	"	"	"		23:12	23:14	B	[illegible]
34583	HD107325	12 15.3	+27 11	"	"	13/1.5	61°F	23:20	23:56	C	[illegible]
34584	HD134837	14 11.1	+18 42	"	"	"		00:00	00:01	A	02 10
34585	HD130109	14 41.2	+[illegible] 09	"	"	"		00:05	00:07	B	[illegible]
34586	HD141455	15 99.1	+13 61	"	"	"		00:11	00:13	C	[illegible]
34587	HD152619	16 49.3	+10 20	"	"	"		00:49	00:51	A	[illegible]
34588	HD159026	17 27.3	+21 57	"	"	"		00:59	01:27	B	00 28
34589	HD[illegible]	17 [illegible]	+[illegible]	"	"	"	61°F	01:30	01:34	C	[illegible]
34590	HD172178	18 58.5	+1 40	"	"	"		01:57	01:55	A	[illegible]
34591	HD[illegible]	11 [illegible]	[illegible]	"	"	"		01:56	02:02	B	[illegible]
34592	HD[illegible]	19 [illegible]	+59 41	"	"	"		02:05	02:09	C	[illegible]
34593	HD[illegible]	20 [illegible]	+[illegible]	"	"	"		02:15	02:33	A	01 27

Dome Temp. 59° H = 86%

Focus .....

Dome Temp. .....

Transparency Conditions Lots of G-L. haze - fair

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Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]	[illegible]	02 34W	+10° 46'	2-3	5.29	A2V	8-8	Sp. Bin-Blu	200/85		V.SL WK
[illegible]	[illegible]	03 02W	+29 47	2	8.7	gF3	5-6-6	"	800/300		SL. WK
[illegible]	[illegible]	03 38W	+4[illegible] [illegible]	"	6.46	A0	6-6-6	"	400/180		SL WK
[illegible]	[illegible]	01 28W	+52° 00'	2	4.54	A7IV	9-9	"	90/15		(GUIDING) FINE
[illegible]	[illegible]	00 55W	-15 50	2-3	2.79	A[illegible]	9-9	"	40/15		FINE
[illegible]	[illegible]	[illegible]	+26 53	"	[illegible]	[illegible]	9-5-5	"	200/130		SL. WK
[illegible]	[illegible]	02 18W	+19 29	2"	6.30	[illegible]	9-9	[illegible]	[illegible]/19		FINE
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	A0V	9-9	Sp. Bin. Blu	[illegible]/15		FINE
[illegible]	[illegible]	[illegible]	+12 55	2	[illegible]	A[illegible]	6-6-6	"	[illegible]/100		(GUIDING) SL. WK
[illegible]	[illegible]	[illegible] W	+10 17	1-2	4.10	B[illegible]	9-9	"	40/15		FINE
[illegible]	[illegible]	00 28W	+3[illegible] [illegible]	1-2	[illegible]	F[illegible]	6-6-6	"	400/230		(GUIDING) FINE
[illegible]	[illegible]	00 04W	-1 23	"	4.99	A1V	6-6-6	"	240/15		FINE
[illegible]	[illegible]	[illegible] E	+1 53	"	[illegible]	A2	6-6-6	"	200/[illegible]		VSL WK
[illegible]	[illegible]	[illegible] 18W	+42 15	1	[illegible]	[illegible]	6-6-6	"	[illegible]/25		FINE
[illegible]	[illegible]	[illegible] 16W	+[illegible] 50	1	4.93	A1V	9-9	"	40/17		(GUIDING) FINE
3	14	01 27E	+48 09	1	[illegible]	[illegible]	6-6-6	"	[illegible]/180		SL. WK

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Date [illegible] **Observer** [illegible] **Julian Day** [illegible]

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
[illegible]	HD 187459	19 45.0	[illegible] 11'	G12	IIaO	13/15		02:31	02 52	B
[illegible]	HD [illegible]	[illegible]	[illegible]	"	"	"		[illegible]	[illegible]	A
34596	[illegible]	[illegible]	[illegible]	"	"	"		[illegible]	03:28	C
34597	HD [illegible]	[illegible]	[illegible]	"	"	"		[illegible]	[illegible]	B
34598	HD 193125	20 45.5	+36 07	"	"	"		03:35	[illegible]	A
34599 R	Focus			"	"	13	60°			R

Dome Temp. .....

Transparency Conditions .....

Focus .....

Dome Temp. 57°F H= 92%

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		00 25E	[illegible]	1-2'	5.66	B0V	6-6	Sp Bin-Ph	400/180	[illegible]	SC. WK
		[illegible]	[illegible]	2	5.6	A0	6-6	"	200/75		FINE
		01 30E	+12 05	2-3'	5.02	B0V	5½-6	"	200/85		V. SC WK
		00 04E	+36 50	"	4.82	B3Ie	9-9	"	40/15		(GUIDING) FINE
		00 28E	+36 38	1-2"	4.42	B1I	9-9	"	40/15		FINE
			[illegible]				7½	[illegible]			GOOD

Date June 9/5 [illegible] **Observer** J. Dinn/ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34599	HD 124647	14 11·1	+19 42	G.C.	I.O.O	13/15	79°F	20:32	20:33	A
34600	HD 105898	12 06·2	+25 19	"	"	13/13	78°F	20:45	21:51	B

Dome Temp. 64°F H=225

Transparency Conditions Some cloud & haze

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 06 E	+19 25	2"-3"	1.29	K2II	9-9	[illegible]	40/20		(BUSING) FINE
02 22 W	+25 01	1"-3"	8.19	G2V	3-3-3 3-3-3	S 5 V	800/270	cloud (cirrus)	SL WEAK

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Date [illegible] Observer [illegible] Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34601	HD 153720	16 56.0	+75 34	612	IIaO	13/15		20 49	21:25	A
34602	HD 154528	17 00.1	+73 48	"	"	"	71°F	21 36	21:58	C
34603	HD 176316	18 54.6	+38 07	"	"	9/17		22 07	22:57	B
34604	HD 149287	16 00.0	+25 30	"	"	13/13	70°F	23 02	23:42	C
34605	[illegible]	16 06.0	+27 01	"	"	"	70°F	23 45	00:15	A
34606	HD 171550	18 30.4	+29 40	"	"	"		00 18	00:48	B
34607	HD 173377	17 24.3	+29 14	"	"	"	69°F	00 55	01:41	C
34608	HD 165192	18 07.4	+35 32	"	"	13/15		01 44	02:50	A
34609	HD 176316	18 54.6	38 07	"	"	9/17		02 55	03:31	C
~~34610~~	~~HD 161696~~	~~17 35.5~~	~~+44 37~~	~~"~~	~~"~~	~~13/15~~				A
34609F	Focus Test			"	"	13				B

Dome Temp. 54°F 83% = H

Transparency Conditions [illegible]

Focus .....

Dome Temp. 66°F [illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 47E	+75 30	1"-2"	6.84	F0	6-5-6	Sp Bin-G2	400/230		SL. WEAK
02 17E	+77 45	"	6.66	A0	6-6-6	"	400/180		FINE
03 17E	+38 18	2-3"	5.7	B6-7	6-6-6	"	400/280	[illegible] cloud	FINE
00 22W	+25 24	2"	8.24	G8 V	3-3-3 3-3-3	S S V	800/310		SL. WEAK
00 40W	+26 54	"	9.14	K0 III	3-3-3 3-3-3	S-V	800/330	[illegible]	SL. WEAK
01 56E	+29 47	"	8.00	K0 III	3-3-3 3-3-3	"	800/270	[illegible]	V. SL. WEAK
0[illegible] 04E	+17 [illegible]	1-2"	[illegible]	[illegible]	6-6-6	"	[illegible]/340	"	SL. WEAK
01 24W	+25 38	1"-4"	8.14	K1 III	6-6-6	"	[illegible]	cloud	SL. WEAK
01 17W	+38 14	2"	5.7	B6-7	6-6-6	Sp Bin-G2	400/240	"	FINE
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~3.93~~	~~K2 III~~	~~[illegible]~~	~~cloud~~	~~40/~~		
[illegible]	[illegible]	[illegible]			3/3	no filter		[illegible]	

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* baked 16 hr plates

Date June 8-9 / 71 TUES-WED **Observer** G.Z. - T.n **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34610	HD 82191	09 25.4	+27 50	G12	IIaO*	13/0.5	63°F	20 : 44	21 : 26	A
34611	HD 139892	15 35.6	+36 58	G12	"	13/0.7	"	21 : 31	21 : 45	B
34612	HD 176318	18 54.6	+38 07	"	"	13/0.7	"	21 : 50 (33)	22 : 13	C
34613	HD 153720	16 56.0	+75 34	"	"	13/0.5	61°F	22 : 24	23 : 26	A
34614	HD 154528	17 00.9	+77 48	"	"	13/0.5	"	23 : 32	00 : 20	B
34615	HD 172187	18 33.7	+43 08	"	"	13/0.5	57°F	00 : 29	00 : 56	C
34616	HD 180316	19 11.0	+27 46	"	"	13/0.5	"	01 : 01	01 : 39	A
34617	HD 186547	19 39.9	+13 04	"	"	13/0.5	55°F	01 : 43	02 : 09	B
34618	HD 192276	20 09.0	+47 26	"	"	13/0.5	"	02 : 14	02 : 46	C
34619	HD 199892	20 54.8	+41 33	"	"	13/0.5	"	02 : 48	03 : 06	A
34620	HD 176318	18 54.6	+38 07	"	"	13/0.7	"	03 : 09 (11)	03 : 26	C
34621	HD 209733	22 01.1	+28 28	"	"	13/0.5	"	03 : 30	03 : 44	A
34621 F1	Focus Test			"	"	13	54°F			B

Dome Temp. 59°F H: 62%

Focus

Dome Temp. 50°F H=63%

Transparency Conditions EXCELLENT (SEEING POOR)

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
6	A	04 46W	+27° 38'	2'-6"	6.59	A0	6-6-6	SPEC. BIN.	400/200		(GUIDING) SL. STRONG
5	B	01 03E	+36° 50	3'-5"	5.1	B7V	6-6-6	"	400/280		STRONG
3	C	03 50E	+38 19	"	5.7	B6-7	6-6-6	"	400/280		SL. STRONG
6	A	00 37E	+75 30	"	6.84	F0	6-6-6	"	400/260		SL. STRONG
0	[illegible]	00 11W	+77 45	"	6.66	A0	6-6-6	"	400/200		SL. STRONG
53	C	00 49E	+43 16	2'-4"	6.36	A5	6-6-6	"	400/200		SL. STRONG
4	A	00 44E	+28 00	"	6.67	B5	6-6-6	"	400/200		SL STRONG
0	B	00 44E	+13 17	"	6.1	B8V	6-6-6	"	400/200		SL. STRONG
[illegible]	C	00 35E	+47 42	"	6.6	B2V	6-6-6	"	400/200		(GUIDING) SL. STRONG
36	A	01 00E	+41 52	"	6.0	B7V	6-6-6	"	400/200		SL. STRONG
[illegible]	C	01 30W	+38 17	"	5.7	B6-7	6-6-6	"	400/280		STRONG
44	A	01 30E	+28 54	"	5.58	A0V	6-6-6	"	200/100		SL STRONG
	B	[illegible]	[illegible] out				3/3	no filter			GOOD

TELESCOPE APPEARS TO BE AT LEAST TWICE AS FAST

Date JUNE 9/10 1971 WED/THU **Observer** G.Z. - R.I. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34622	HD 82191	09 25.4	+27 50	G12	IIa-F*	13/0.5	58°F	20 47	21 18	A
34623	HD 139892	15 35.6	+36 58	"	"	13/0.7	"	21 25	21 35	B
34624	HD 176318	18 54.6	+38 07	"	"	13/0.7	"	21 41 (26)	22 01	C
34625	HD 153720	16 56.0	+75 34	"	"	13/0.5	60°F	22 08	23 04	A
34626	HD 154528	17 00.9	+77 48	"	"	13/0.5	"	23 08	23 45	B
34627	HD 176318	18 54.6	+38 07	"	"	13/0.7	58°F	23 52 (27)	00 19	C
34628	HD 180316	19 11.0	+27 46	"	"	13/0.5	"	00 23	01 05	A
34629	HD 186547	19 39.9	+13 04	"	"	13/0.5	"	01 09	01 37	B
34630	HD 192276	20 09.0	+47 26	"	"	13/0.5	56°F	01 42 (11)	02 15	C
34631	HD 176318	18 54.6	+38 07	"	"	13/0.5	"	02 19	02 30	A
34632	HD 197892	20 54.8	+41 33	"	"	13/0.5	"	02 34	02 50	B
34633	HD 201433	21 04.4	+29 48	"	"	13/0.5	"	02 53	03 02	C
34634	HD 214946	22 36.7	+44 29	"	"	13/0.5	54°F	03 06 (14)	03 39	A
34635	HD 176318	18 54.6	+38 07	"	"	13/0.5	"	03 42	03 54	B
34635F1	focus test	[illegible]	[illegible]	G0	IIa O	9	54°F			B
					* PLATES BAKED 16 HRS.					

Dome Temp. 54°F H=56%

Focus

Dome Temp. 50°F H=62%

Transparency Conditions EXCELLENT (SEEING POOR, THEN BETTER)

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
5	F	04 43 W	+27 38	1-3"	6:59	A0	6-6-6	SPEC. BIN	400/200		SL. STRONG
5	3	01 09 E	+36 50	2"	5.1	B7V	6-6-6	"	400/280		VERY STRONG
4	C	04 02 E	+38 18	~2"	5.7	B6-7	6-6-6	"	400/280		STRONG
4	A	00 58 E	+75 28	2-3"	6.84	F0	6-6-6	"	400/220		SL. STRONG
5	3	00 19 E	+77 45	"	6.66	A0	6-6-6	"	400/200		SL STRONG
4	C	01 44 E	+38 16	"	5.7	B6-7	6-6-6	"	400/280		STRONG
5	1	01 15 E	+28 00	"	6.69	B5	6-6-6	"	400/200		SL. STRONG
7	3	01 10 E	+13 17	"	6.1	B3V	6-6-6	"	400/200		SL STRONG
5	1	01 02 E	+47 44	"	6.6	B2V	6-6-6	"	400/200	Broken: 2 pcs.	SL. STRONG
3	A	00 22 W	+38 18	1-2"	5.7	B6-7	6-6-6	"	400/200		STRONG
50	B	01 13 E	+41 53	"	6.0	B7V	6-6-6	"	400/200		STRONG
02	C	01 10 E	+30 10	~1"	5.6 5.79	A0	6-6-6	Si Ap-Bin	400/200		STRONG
9	A	02 05 E	+44 55	"	7.12	A2	6-6-6	SPEC. BIN	400/150		FINE
2	B	01 53 W	+38 19	"	5.7	B6-7	6-6-6	"	400/200		STRONG
	3						3-3	no filter			GOOD

Date JUNE 10/11 1971 THUR/FRID **Observer** GZ - RI **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34636	HD 82191	09 25.4	+27 50	G12	IIaO*	13/0.5	64°F	20 45	21 07	A
34637	HD 139892	15 35.6	+36 58	"	"	13/0.7	"	21 12	21 17	B
34638	HD 176318	18 54.6	+38 07	"	"	13/0.7	"	21 21 (12)	21 33	C
34639	HD 153720	16 56.0	+75 34	"	"	13/0.5	62°F	21 40	22 05	A
34640	HD 154528	17 00.9	+77 48	"	"	13/0.5	"	22 10	22 25	B
34641	HD 172187	18 33.7	+43 08	"	"	13/0.5	"	22 31	22 44	C
34642	HD 180316	19 11.0	+27 46	"	"	13/0.5	"	22 49	23 11	A
34643	HD 180398	19 11.3	+12 56	"	"	13/0.3	"	23 16	23 50	B
34644	HD 186547	19 39.9	+13 04	"	"	13/0.5	"	23 56	00 16	C
34645	HD 192276	20 09.0	+47 26	"	"	13/0.5	60°F	00 21	00 53	A
34646	HD 176318	18 54.6	+38 07	"	"	13/0.7	"	00 58 (12)	01 10	B
34647	HD 153720	16 56.0	+75 34	"	"	13/0.5	"	01 18	01 52	C
34648	HD 154528	17 00.9	+77 48	"	"	13/0.5	"	01 57	02 27	A
34649	HD 199272	20 54.8	+41 33	"	"	13/0.5	58°F	02 39	03 01	B
34650	HD 209733	22 01.1	+28 28	"	"	13/0.5	"	03 07	03 22	C
34650 F1	focus test	out on D1	in i			9	56°F			

Dome Temp. 55°F H=52%
Focus 21 R
Dome Temp. 50°F H-54%

Transparency Conditions EXCELLENT (SEEING TOO)

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
7	A	04 35 W	+27 38	~1"	6.59	A0	6-6-6	SPEC. BIN.	400/200		FINE
	B	01 23 E	+36° 50	"	5.1	B7V	6-6-6	"	200/125		STRONG
3	C	04 27 E	+38 18	"	5.7	B6-7	9-9	"	200/125		SC. STR.
		01 52 E	+75 32	"	6.84	F0	6-6-6	"	400/220		FINE
		01 35 E	+77 45	"	6.66	A0	6-6-6	"	400/200		FINE
4		02 55 E	+43° 14'	"	6.26	A5	6-6-6	"	400/200		FINE
		03 05 E	+28 00	"	6.69	B5	6-6-6	"	400/200		SC. STR
6		02 26 E	+13 07	"	7.7	B3e	6-6-6	"	400/120		FINE
		02 27 E	+13 18	1-2"	6.1	B8V	6-6-6	"	400/200		SC. STR
		02 30 E	+47 44	"	6.6	B3V	6-6-6	"	400/200	SOME HAZE	STR.
		00 49 E	+38 18	~1"	5.7	B6-7	6-6-6	"	200/125		STRONG
		01 56 W	+75 31	1-2"	6.84	F0	6-6-6	"	400/220	" "	FINE
1		02 28 W	+77 45	"	6.66	A0	6-6-6	"	400/190	SOME HAZE	FINE
		00 58 E	+41 52	"	6.0	B7V	6-6-6	"	400/200	HEAVY HAZE	SC. STR
		01 45 E	+28 51	"	5.57	A0V	6-12	"	400/65	" " CUT SHUT	FINE
							3-3	no filter			GOOD

59

Date Fri Sat June 11/12 1971 **Observer** Bl. - Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34651	HD 93702	10 44.0	+11 04	G12	IIaO	13/0.5	63°F	21:05	21:19	A
34652	HD 107325	12 15.3	+27° 11	"	"	13/0.3		21:22	21:40	B
34653	HD 130841	14 45.4	-15 38	"	"	13/0.5		21:44	21:52	C
34654	HD 124675	14 09.9	+52 15	"	"	"		21:57	22:13	A
34655	HD 103483	11 99.9	+47 02	"	"	"		22:33	22:42	B
34656	HD 141452	15 44.1	+ 13 01	"	"	"		23:55	00:45	C
34656	focus test	on/off/w.i.		G2	IIaO	9	60°F			B

Dome Temp. 56°F H-55%

Focus 21 R

Dome Temp. 52°F 52%

Transparency Conditions Some Clear - [illegible] Cloud (.037) 60

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03 33W	+10 49	2-3	5.29	M2 II	6-7-7	Sp Bri-13/n	200/95		FINE
02 23W	+26 53	1-2	6.72	gK2	7-7-7	"	400/190		FINE
00 05W	-15° 50	2	2.9	Am	10-10	"	40/16	clouds	(illegible) FINE
01 02W	+52 00	2	4.74	A7 IV	7-7-7	"	200/81	clouds	(illegible) FINE
04 57W	+46 44	1-2	6.46	A0	7-7-7	"	400/186	clouds	(illegible) SL. WK
02 00W	+12°54	2	6.80	A0	7-7-7	"	400/150	" at start to many clouds	SL. WK
					3-3 no filter				GOOD
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		

61

Date Mon-Tue 14/15 June '71 **Observer** Bln-R/Ow-R **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34657	HD 104451	11 56.6	+30 06	G-12	IIa-O	20/1.3	68°F	21:09	23:27	A
34658	HD 141457	15 44.1	+13 01	"	"	13/1.5		23:31	00:15	B
34659	U Vul - D 130027	19 30.2	+20 [illegible]	"	"	14/1.5		00:25	01:32	C
34660	R Scl - HD	[illegible]	[illegible]	"	"	[illegible]/3		02:36	03:31	A
34661	[illegible]	19 [illegible]	[illegible]	"	"	[illegible]/1.5		03:57	04:40	B
34662	HD [illegible]	20 [illegible]	[illegible]	"	"	3/1.5		03:15	03:24	C
34663	HD 192635	20 11.0	[illegible] 17	"	"	"		03:27	03:34	A
34663F1	focuster	[illegible]	[illegible]	G-0	IIa-O	9	61°F			B
34663 T1	calibration step wedge for plates 34657 - 34663								15 June '71	

Dome Temp. 61° H = 62%

Transparency Conditions Excellent

Focus 21.0 R

Dome Temp. 56°F 70%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
4h 40m W	+29° 48'	2-3	8.7	gF3	7-7-7	Sp. Bin-Bin	800/285		SL. WK
[illegible]	+29° 53'		[illegible]	A0	7-7-7	"	[illegible]/195		SL. WK
[illegible]	[illegible]		[illegible]	[illegible]	7-7-7	[illegible]	[illegible]/320		WEAK
[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	300/12		NOTHING
[illegible]	+01° 02'	2-3	[illegible]	[illegible]	7-7-7	[illegible]	200/130		FINE
[illegible]	[illegible]		[illegible]	[illegible]	7-7-7	[illegible]	200/100		SL. STR
6h 37m W	+26° 36'		4.59	B3V	7-7-7	"	200/100		STRONG
					3-3 no filter				GOOD
mWR. 2/9.0 min @ 68°F/				240	1x0				

Date Tue Wed 5/16 Jun 71 **Observer** [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34664	HD 124674	14 09.9	+52 16	B-12	IIa-O	13/0.5	65°F	20:55	[illegible]	A
34665	HD 124675	"	"	"	"	"	"	21:50	21:56	B
34666	HD 124100	16 39.2	+53 06	"	"	"	"	22:09	22:22	C
34665F1	focus test	[illegible]	"	"	"	"	64°F	"		D
34667	HD 126-116	19 55.0	+39 11	B40	IIa-O	13/0.5	62°F	22:42	00:37	E
34667F1	focus test			B40		13	51			F
34667 F1	step nudge for plate 34664 – 34666								16 ~~15~~ June 97	

Dome T
Focus
Dome T
Hour Ang End

Dome Temp. 58°F 76%

Focus

Dome Temp. 50°F 54%

Transparency Conditions [illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]	+52° 00	3	6.61	F0	7-7-7	[illegible]	470/260		(G WINGS) FINE
[illegible]	[illegible]	3	4.00	A8	7-7-7	"	240/120		SL. STRONG
[illegible]	+58° 00	3	5.64	A0	7-7-7	"	240/120		FINE
					3-3	no filter		3 [illegible]	[illegible] TO RED
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		480/240	[illegible] 36	FINE
					[illegible]	[illegible]			?
MWP-2 / 9.0 min @ 68° F / 2 [illegible]									

65 11 b = BAKED

Date Wed. Thurs June 16/17/71 **Observer** T. McU **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34668	HD 124897	14 11.1	+19 42	612	IIIaO	13/.5	67°F	20:49	—	A
34669	HD 145457	16 06.0	+27 01	"	"	13/.3	66°F	21:00	21:36	B
34670	HD 154510	17 00.8	+28 14	"	IIIaOb	"	65°F	21:40	22:36	C
34671	HD 168972	18 07.4	+25 32	"	"	"	"	22:40	23:24	A
34672	HD 171650	18 30.4	+29 42	"	"	"	64°F	23:27	00:05	B
34673	HD 185997	19 24.3	+27 14	"	"	"	63°F	00:08	00:49	C
34674	HD 190228	19 58.9	+28 32	"	"	"	"	00:52	01:48	A
34675	HD 204540	21 24.2	+25 31	"	"	"	62°F	01 51	02:31	B
34676	HD 209642	21 24.9	+28 09	"	"	"	61°F	02 34	03:06	C
34677	HD 175318	18 54.6	+38 07	"	"	13/.7	"	03 10	03:26	A
34678	HD 191610	20 05.7	+36 33	"	IIIaO	13/.5	60°F	03 28	03:31	C
34678 F1	Focus	Test		"	IIIaOb	13				B

Dome Temp. 60°F H=71%

Focus

Dome Temp.

Transparency Conditions very good (some haze) & sl fog

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		0003E	———	2"	1.29	K2IIIp	10-10	std Vel	40/20		(Low Dwn) Sl. STR
36	1	0[illegible]2E	+26 54	1"-2"	8.14	K0III	7-7-7	SSV	800/400	1/3" broken off [illegible]	FINE
36	1	0106E	+28 12	2"	8.59	K1III	7-7-7	"	800/350		FINE
34	1	0125E	+25 38	2"	8.14	K1III	7-7-7	"	800/350		FINE
15	1	0136E	+29 47	"	8.00	K0III	7-7-7	"	800/350		FINE
49	1	0115E	+27 27	2"-3"	8.09	K5III	7-7-7	"	800/400		FINE
41	1	0152E	+2[illegible]17	2"	3.3[illegible]	B5III	7-7-7	"	800/350		FINE
31	1	0134E	+25 52	"	8.44	K2III	7-7-7	"	800/400		FINE
06	C	0100E	+23 31	1"-2"	8.14	K2III	7-7-7	"	400/200		FINE
36	1	0150W	+33 18	"	5.7	B6-7	7-7-7	sp Bin-Gz	200/125		SL. STR
31	C	0045W	+36 48	1"	4.82	B3Ve	10-10	sp Bin-Bln	40/16		SL. STR
		[illegible]					3/3	no filter			(GOOD)
										Anson - We need more plates - Thanks, Ta	

Date Thurs-Fri June 17/18/71 **Observer** Bln-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34679	HD130841	14 45.3	−15 37	G-12	IIa-O	13/.5		20:45	20:47	A
34680	HD107225	12 15.3	+27 11	"	"	13/.3		20:52	22:58	E
34681	HD103423	11 49.9	+47 02	"	"	13/.5	69°F	23:01	23:45	C
34682	HD124675	14 09.9	+52 15	"	"	"		23:50	23:54	A
34683	HD157751	16 16.2	+82 12	"	"	"		00:02	00:10	C
34684	HD170073	18 22.5	+37 45	"	"	"		00:15	00:21	C
34685	HD124897	14 11.1	+19 42	"	"	"	67°F	00:26	00:27	A
34686	HD130109	14 41.2	+2 19	"	"	"		00:32	00:36	B
34687	HD141456	15 44.1	+13 01	"	"	"	66°F	00:42	01:40	C
34688	HD139892	15 35.6	+36 52	"	"	13/.7		01:44	01:58	A
34689	HD153614	16 49.5	+10 20	"	"	13/.5		02:01	02:05	B
34690	HD187459	19 45.0	+33 11	"	"	"		02:10	02:33	C
34691	HD195965	20 39.3	+47 53	"	"	"		02:34	03:14	A
34692	HD 201433	21 04.4	+29 48	"	"	"		03:18	03:30	C
34693	HD19[illegible]	[illegible]	+36 [illegible]	"	"	"		03:32	03:34	A
34693 1A	Focus			"	"	13	65°F			B

Dome Temp. 64°F H = 64%

Transparency Conditions Good – some v. lt. cirrus

Focus

Dome Temp. 59° H = 78%

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	00 36E	−15 52	2-3	2.89	Am	10-10	Sp. Bin-Blu	40/16		FINE
		04 05W	+26 51	1-2	6.72	gK2	7-7-7	"	200/500	This plate is broken in half. Please destroy anyway. Exposure for K2 [illegible]	PIOR BROKEN
	C	05 12W	+46 43	2	6.46	A0	7-7-7	"	400/180	broken 2pc	BROKEN FINE
54	A	03 06W	+52°00	1-2	4.74	A7IV	10-10	"	40/16	(DOUBLE EXP. FOR Fe LINES)	FINE
		00 45W	+22 10	2-3	4.28	G5III	10-10	"	40/19		FINE
81		00 37E	+58 49	1-2	4.95	A1V	10-10	"	40/16		FINE
82	A	03 39W	+19 25	2"	1.00	K2IIp	10-10	std vel	40/19		FINE
83	B	03 19W	+ 2 06	3	3.74	A0V	10-10	Sp. Bin-Blu	40/16		FINE
83		03 19W	+ 12 54	2	2.80	A0	7-7-7	"	400/190	Eq.	FINE
58	A	03 45W	+16 19	1-2	5.1	B7V	7-7-7	Sp. Bin-Bz	200/140		SL. STR
	B	03 39W	+10 18	1-2	4.30	B8V	10-10	Sp. Bin-Blu	40/16		(cal. [illegible]) SL. STR
	C	00 11W	+23 26	1-2	6.66	B0.5V	7-7-7	"	400/180		FINE
14	A	00 10W	+48 12	"	6.72	B2	7-7-7	"	400/185		SL. STR
	C	00 10E	+30 07	"	5.6	A0	10-10	"	200/85		SL. STR
	A	00 15W	+32 28	"	4.42	G5V	10-10	"	40/15	WEAK FOCUS	SL. STR
							3/3	[illegible]			GOOD

Date [illegible] Observer [illegible] Julian Day [illegible]

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34694	HD 130291	14 45.3	-15 38	6-12	IIa-O	13/5		20:43	20:45	A
34695	HD 124897	14 11.1	+19 42	"	"	"	73°F	20:47	20:50	B
34696	HD 124897	14 11.1	+19 42	"	"	"		20:51	20:55	C
34697	HD 164455	17 52.6	+30 06	"	"	20/3		21:01	23:21	A
34698	HD 141465	15 [illegible]	+19 [illegible]	"		B/C		23:30	00:30	[illegible]
34699	[illegible]	19 30.2	+20 [illegible]	"		13/3		00:30	01:47	C
34700	TT Aql	19 03.2	+01 09	"	"	"	65°F	01:53	03:35	A

Dome Temp. [illegible]

Transparency Conditions [illegible]

Focus

Dome Temp. 60°F H=77%

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
5	A	0035E	-15 50	2"	2.89	A[illegible]	12-12	Sp. [illegible]	40/16		(GUIDING) SLOW
[illegible]	[illegible]	[illegible]	+19 25	2	1.30	K2III	12-12	[illegible]	40/20		FINE
[illegible]	[illegible]	[illegible]	+19 25	2	1.30	K2III	12-12	"	40/99	[illegible]	VERY STRONG
[illegible]	[illegible]	0450W	+2948	1-2	8.7	gF3	7-8-8	Sp. [illegible]	200/240	[illegible] *	(GUIDING) FINE
[illegible]	[illegible]	0204W	+12 [illegible]	"	6.80	A0	8-8-8	"	400/190	Some cloud - [illegible]	FINE
[illegible]	C	[illegible]17E	+2021	2"	7.8-9.0	F8-K0	8-8-8	Cepheid-Rm	800/350*		FINE
[illegible]	A	01h 57W	+01° 21'	1"-2'	7.29-7.08	F8-K0	7-8-8	"	800/180	[illegible] (cutshort) [illegible] *	SLOW **
										* overdevelop please	
										** HIGH BACKGROUND	FOG

71

Date June 19/20 Sat.-Sun. **Observer** Dy-Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34701	R Sct	18h 42.1	-05° 19	G-12	IIa-O	13/.3	71°	0h 05	02:55	A
34702	HD176318	18 54.6	+38 07	"	"	13/.7		02h 59 (36)	03:35	B

Dome Temp. 66°F 84%

Transparency Conditions Hazy

Focus

Dome Temp. 65°F 78%

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
55	A	01 43 W	-05 39	1-2"	6.3	G2 K0	8-8-8	RV Tau	800/370		VERY WEAK
5	B	02 11 W	+38 18	"	5.7	B6-7	8-8-8	sp Binr-6	200/120		

Date June 20/21/71 Sun-Mon **Observer** McU-To **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34703	HD139192	15 35.6	+36 58	G-12	IIaO	13/0.7		20:50	21:02	A
~~34704~~	~~HD153720~~	~~16 53.8~~	~~+75 27~~	"	"	~~13/0.5~~	~~77°F~~	~~21:16~~		~~B~~
	plate 34694 - 34696, 34698 - 34699, 34701 - 34703 dew 21 June 1971									
	plate 34697, 34700 dew 15 min @ 68°F									

Dome Temp. 75°F H=81%

Transparency Conditions very good-slight haze

Focus

Dome Temp. 7: 55%

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02	A	0100E	+36 48	1"	5.1	B7I	12-12	G2 SPEC. BIN.	200/210		STRONG
	B		~~+75 31~~	~~1"-2"~~	~~6.84~~	~~F0~~	~~8-~~	"	~~400/~~	some cloud	
										Closed 22h	
		MWP 2/ 9.0 min @ 65°F				/2 rocked					

Date June 21 – 22 / 1971 **Observer** Hus-Ty **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
	I R Phot.		all night							

Dome Temp. 60 60%

Focus

Dome Temp. 55 70%

Transparency Conditions Excellent - some cloud

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality

Date Tue/Wed 22/23 June '71 **Observer** Bln-Tn/[illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34704	HD 130871	14 45.3	−15 38	6-12	IIa-O	13/.5	70°F	20:41	20:43	A
34705	HD 107325	12 15.3	+27 11	"	"	13/.3		20:54	22:20	B
34706	HD 107325	[illegible]	+27 11	"	"	"	[illegible]°F	22:21	[illegible]	C
34707	HD [illegible]	[illegible]	+12 30	"	"	13/.5		22:43	23:07	A
34708	HD 152614	16 49.3	−10 30	"	"	"		23:10	[illegible]	B
34709	HD [illegible]	19 45.0	+33 11	"	"	"		23:17	[illegible]	C
34710	HD [illegible]	20 29.3	+47 [illegible]	"	"	"		23:39	00:01	A
34711	HD 178350 = TTAql	19 03.1	+01 08.5	"	"	13/.3		00:08	01:58	B
34712	HD [illegible]	[illegible]	+35 14	"	"	9/.5		02:04	02:20	C
34713	SU Cyg	19 40.8	29 01	"	"	"		02:23	02:49	A
34714	T Vul	20 47.2	+27 58	"	"	"		02:52	03:14	C
34714 F1	Focus			"	"	9	65°F			B
	I R Phot	tilt down (testing Hist-Tn)								

Dome Temp. 64° H=57%

Transparency Conditions Excellent

Focus

Dome Temp. 60° H: 64%

MIRROR COVER LEFT OPEN (9:30 am June 23rd)

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2	A	0017E	-15 51	2	2.89	Am	12-12	Sp. Bin-Bin	40/16		SL. STR
2	C	0348W	+26 54	1-5	6.72	gK2	8-8-8	"	200/[illegible]	Ex. [illegible] counting	VERY STRONG
1	C	[illegible]	"	1-2	[illegible]	gK2	8-8-8	"	200/100	Ex. [illegible] counting	FINE
2	C	0105W	+12 54	1	[illegible]	A0	8-8-8	"	[illegible]/100	[illegible] "	SL. STR
[illegible]	[illegible]	[illegible] W	+[illegible] 19	1-2	[illegible]	[illegible]	12-12	"	40/16		(GUIDING) SL STR
1	A	0229E	+33 27	1	[illegible]	[illegible]	8-8-8	"	400/—		(GUIDING) SL STR
[illegible]	A	[illegible]E	+[illegible] 10	1	[illegible]	[illegible]	8-8-8	"	400/—		SL. STR
3	[illegible]	0037W	+01 21	1-2"	7.21-9.08	F0-K0	8-[illegible]	[illegible]	100/—		FINE
3	C	0037E	+35 34	1"	[illegible]	[illegible]	8-8-[illegible]	[illegible]	200/—		FINE
[illegible]	A	0051W	+29 16	1-2"	8.8-7.66	F0-G1	8-8-8	"	200/—	PLATES NUMBERED 14	
4	C	0010W	+28 13	1"	[illegible]	[illegible]	8-8-	"	200/		
	A	[illegible]	[illegible]				3/3	[illegible]			GOOD

19 2 Visitor Years

Date Sat. Sun. June 26/27/71 **Observer** Dy-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
~~34715~~	~~RCrB~~	~~15 44.4~~	~~+28 28~~	~~G12~~	~~IIa0~~	~~13/.5~~		~~23:12~~	~~23:26~~	~~A~~
34716	R Sct	18 41.1	-05 49	"	"	13/.3		22:42	00:10	C
34717	RCrB	15 44.4	+28 28	"	"	13/.5	67°	00:17	00:47	B
34718	AC Her	18 26.0	+21 48	"	"	13/.3		00:50	02:18	C
34719	S Sge	19 51.5	+16 22	"	"	9/.5	65°F	02:22	02:44	A
34720	SU Cyg	19 48.8	+29 01	"	"	9/.3		02:48	03:34	B
34721	HD 206778	21 39.3	+9 25	"	"	9/.5		03:37	03:47	A
34721 F1	Focus Test			G12	IIa0	9	65°F			E
34721 T1	calibration step wedge for plates 34715 - 34721								28 June 1971	

Dome Temp. 60°F H-55%

Transparency Conditions Excellent

Focus

Dome Temp. 60°F H-62%

Time	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
6	[illegible]	~~01 50W~~	~~+28 20~~	~~1"-2"~~	~~6.4~~	~~F8 [illegible]~~	~~8-8-8~~	~~RCB~~	~~200/130~~	~~[illegible]~~	~~[illegible] PLATE~~
0	C	2' 35E	-05 39	2"	6.3-8.6	G0-K0	8-8-8	RV Tau	400/240	maybe fog?	FINE
7	B	03 00W	+28 19	2"-3"	6.4	F8 [illegible]	8-8-8	RCB	[illegible]/130		(SLIGHT [illegible]) FINE
8	C	0150W	+21 54	2"	7.4-9.6	F2-K4	8-8-8	RV Tau	800/400		FINE
4	A	0052W	+16 22	"	5.87-7.62	F6 [illegible] G5 [illegible]	8-8-8	Cepheid-Run	300/130		FINE
4	B	0153W	+29 17	"	6.8-7.66	F0-G1	8-8-8	"	400/180		FINE
1	A	[illegible]	+09 49		3.98	K2 [illegible]	12-12	std 181	40/21		FINE
	B	[illegible]	[illegible]	[illegible]			3/3	[illegible]			GOOD
										1st crop [illegible]	
[illegible]	47	The CP-2 / 9.0 min @ 68°F				(2 [illegible] K0)				noted at dawn	
					PERHAPS IN THE					* JAMMED IN PLATE	
			EXTERIOR, BROKEN PLATES					→		BOX IMPOSSIBLE	
			SHOULD USE 1 SLOT PER							TO REMOVE IN THE	
			PIECE, SO THEY CANT SLIDE							DARK	
			OVER ONE ANOTHER & JAM.								

81

Date Mon Tues June 28/29/71 **Observer** Hns-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
	IR Photometry		~5							
	Time [illegible]									
	of [illegible]									
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
		[illegible]	[illegible]	[illegible]	[illegible]					
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					
		[illegible]								
	Note	[illegible]	[illegible]				111 volts			
		[illegible]	[illegible]			104 volts	[illegible]			

Dome Temp. 66°F H-78%

Transparency Conditions Southerly cloud

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	at 107	[illegible]	[illegible]	[illegible]			
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

83

Waterloo Night

Date [illegible] June [illegible] **Observer** T. JHM **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34722	ARCTURUS HD 124897	14 11.1	+19 42	610	IN 1.5	9/6	83	21 30	[illegible]	A
34723	"	"	"	"	"	"		21 33	21 36	B
34724	HD 146362	16 10.9	34 07	612	[illegible]	13/5		22:02	22:49	C
34725	HD 146361	"	"	"	"	"	81F	23:17	23:07	A
34726	MH-T 28-116	19 550	+10 41	610	"	17/5	78F	23:32	02:24	A
									30 June 97	
34726 T.	calibration step wedge for plates					34724, 34725				

Dome Temp. 75°F H = 71%

Transparency Conditions Excellent - hazy [illegible] ~2:20

Focus

Dome Temp. 70°F H = 75%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 30W		2"	1.29	K2IIIp	NEON 30	IR Test		30 sec exp	
01 36W		"	"	"	"	"		2 min exp	
00 44W	+34 02	2"	7.71	[illegible]	8-8-8	[illegible]	[illegible]		FINE
01 06W	"	"	[illegible]	[illegible]	2-8-8	"	200/40		FINE
00 42W	+39 49	"	=11	Em	2-2-2	"	800/90	set 11 [illegible] at 2:20	
34722 - 23:4 min (@ 64°F in D.19								(INCIEI)	
34724 - 26:9 min (@ 64°F in McCOD. 2								(2ROCIKO)	

85

Date [illegible] **Observer** [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
3172 Y	ARCTURUS. HD 124897	[illegible]	+15 42	G24	[illegible]	9/6		21 03	[illegible]	

Dome Temp. 75°F 67%

Transparency Conditions

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
			1.29	1.34	2m			60 sec. developed	
								check 5 hrs out	

87

Date Thur. Fri. Feb 1-2 1957 **Observer** MCH - R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34728	HD130841	14 45.4	−15 38	G-12	IIaO	13/0.5	75°F	20 45	20 51	B
34729	HD141527	15 44.4	+28 23	"	"	"		20 56	21 06	A
34730	HD149892	16 35.6	+34 08	"	IIaO	13/0.7	70°F	22 52	23 37	[illegible]
34731	HD167465	18 12.5	+42 08	"	"	13/0.5	67°F	23 54	00 14	C
34732	HD171203	18 30.4	+29 40	"	"	13/0.5	[illegible]°F	00 18	01 54	A
34733	HD182399	19 24.3	+24 14	"	"	"		02 02	02 52	B
34734	HD210925	22 08.6	+25 26	"	"	"		02 58	03 34	C
34735	HD186791	19 41.5	+10 22	"	"	13/0.5	65°F	03 36	03 40	A
34735F	Focus Test	[illegible]		"	IIaO	9	65°F			B

Dome Temp. 67°F 63%

Focus

Dome Temp. 60°F 75% = H

Transparency Conditions High cirrus – gives extinction & poor seeing

88

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 21 W	-15 50		2.39	Am	12-12	Spec. BW-BW	40/30		FINE
[illegible]	+29 20	~3	6.4	F2	8-8-8	R Cr B – JDF	[illegible]	[illegible]	FINE
[illegible]	+36 47	[illegible]	5.1	B7 I	8-8-8	Spec BW – G2	[illegible]	[illegible]	FINE
00 28 W	+42 14	2-3	E 5.1	B6 I	8-8-8	Spec BW – BW	300/100	[illegible]	FINE
01 42 W	+29 47	~2"	8.00	K0 III	4-4-4 / 4-4-4	SSV	300/300	intermittent cloud	FINE
01 45 W	+29 27	~2"	8.09	G1 II	4-4-4 / 4-4-4	SSV	[illegible]	" "	FINE
00 17 E	+25 53	~2	8.05	K0 III	4-4-4 / 4-4-4	SSV	300/300	[illegible]	FINE
02 15 W	+10 39		4.5	K3 II	12-12	STD VEL	40/30		FINE
[illegible]	[illegible]	[illegible]			3-3	[illegible]		[illegible]	SC. CENTRE TO RED

89

Date Fri. Sat. July 23 1971 **Observer** Mrs - R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
	IR	P Interesting								
34756	HD 190228	19 59.9	+25° 52	B-2	IIa-O	13/3	60°F	03:06	03:10	A
34757	HD 190722	20 07.3	+37° 52	"	"	13/5	59°F	03:14	03:55	B

Dome Temp. 60°F 55%

Focus

Dome Temp. 53°F 71%

Transparency Conditions Good

90

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
+33W	+25 0 19	3	8.36	B5N	4-4-4 4-4-4	S.S.U	8W/300		FINE
25W	+25 0 14	3	5.72 6.92	F7.5 G0V	8-0-	[illegible]	3W/123	[illegible]	FINE

91

Date Sat/Sun July 3/4 '71 **Observer** D/- R/Rm R **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34738	R CrB	15 44.4	+28 28	φ-12	E-0	13/.5	68°F	2051	2115	A
34739	AC Her	18 26.0	+21 48	"	103a-0b	13/.3	62	2124	2246	B
34740	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2254	2315	C
34741	HD 139672	15 35.6	+36 57	"	IIa-0	13/.7		[illegible]	2332	D
34742	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	E
34743	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
34744	[illegible]	[illegible]	+01 [illegible]	"	[illegible]	[illegible]	[illegible]	0031	0205	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
34746	[illegible]	[illegible]	+[illegible]	"	[illegible]	[illegible]		[illegible]	[illegible]	C
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9	[illegible]			D

Dome Temp. 60°F 60%

Focus

Dome Temp. 56°F 72%

Transparency Conditions [illegible]

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]	[illegible]	0° 05E	+28 20'	~3"	6.4	P8 Em	8-8-8	RCN?	200/130	thin cirrus	FINE
[illegible]	[illegible]	01°15E	+21°58'	"	[illegible]	[illegible]	8-8-8	[illegible]	500/400		FINE
[illegible]	[illegible]	01°05E	-05° 37	3	[illegible]	[illegible]	8-8-8	"	400/200		FINE
[illegible]	[illegible]	00° 21W	+36° 50'	2	5.1	[illegible]	8-8-8	SPEC, BN	200/210		STRONG
[illegible]	[illegible]	[illegible] 43W	-06 04	3	[illegible]	[illegible]	8-8-8	[illegible]	[illegible]		FINE
[illegible]	[illegible]	E	-16° 40		[illegible]	[illegible]	[illegible]	"	200/[illegible]		FINE
[illegible]	[illegible]	[illegible] 37W	+01 22		[illegible]	[illegible]	[illegible]	"	[illegible]/325	bottom half	WEAK
[illegible]	[illegible]	01 40W	+20° 22		[illegible]	[illegible]	[illegible]	"	[illegible]		SLOW
[illegible]	[illegible]	00° 04W	+29° 16	3	7.4	G1	8-8-8	"	100/130		FINE
[illegible]	[illegible]	[illegible] 26E	[illegible]		[illegible]	[illegible]	[illegible]		100/[illegible]		FINE
							3-3	[illegible]		[illegible] Box no 1	GOOD

Date [illegible] **Observer** [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34748	HD [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	20:45	A
34749	HD [illegible]	[illegible] 21.2	[illegible] 19	"	"	"		[illegible]	20:54	B
[illegible]	HD [illegible]	12 15.3	+27 [illegible]	G.2	[illegible]	13/3		21 00	22 [illegible]	C
34751	HD 153791	16 56.3	[illegible] 12	"	"	13/5		22:08	22.26	A
34752	HD 124675	14 09.8	+52°15	"	"	"		22.32	22:40	B
34753	HD 124897	14 11.2	+19 42	"	"	"		22:44	22:48	C
31763 F,	Focus Cal			G24	IN (Eastman)	13				B
34~~5~~73 71		plates	34728 - 34732, 34748 - 34753						5 Jul 71	
	72		34733 - 34742							
	73	"	34743 - 34747							

Dome Temp. 65°F 65°F

Focus

Dome Temp. 60/0

Transparency Conditions Poor - much haze

9K

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
45		00°27W	-15° 50	3	[illegible]	[illegible]	12-2	[illegible]	40/18		sl. wk
54		00°40W	-03° 05	3	[illegible]	A[illegible]	12-12	"	40/18		sl. wk
[illegible]		[illegible]°11W	+[illegible]° 54	3	6.72	gK2	8-7-8	"	20/90		sl. wk
[illegible]		[illegible]°05W	+92° 10'	2	4.28	G [illegible]	12-12	"	40/23		v. sl. wk
[illegible]		03°00W	+53 01	2	4.74	A[illegible]	12-12	"	80/36		sl. wk
[illegible]		02°23W	+19 26'		1.30	[illegible]	12-12	"	40/[illegible]		(GUIDING) FINE
							neon 4/mm/4mm	with ground glass		Dome slow to open Closed 00:55	
			in-in/out. out								[illegible]

Date Tues. July 27/71 **Observer** W.J.R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34754	HD 134202	15 14.2	+2 09	60"	IIIa(Pan)	12/5	75°F	20 52	21 54	A
34755	HD 141637	15 [illegible]	+26 [illegible]	60"	IIa(orth)	13/13	74°F	22:03	23:33	B
34756	HD 5980	21 [illegible]	+00 [illegible]	60"	"	"	70°F	23:45	00:00	A
34757	L Pisc Aur	23 [illegible]	+00 [illegible]	"	"	"	70°F	03:10	03:32	B
34758	[illegible]	[illegible]	[illegible]	60"	"	13	70°F			B

Dome Temp. 64°F 55%

Transparency Conditions [illegible]

Focus

Dome Temp. 62°F 65%

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		[illegible]	+[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]	—	[illegible]	
		[illegible]	+[illegible]		[illegible]	[illegible]	90-90-[illegible]				good
		[illegible]	-[illegible]		[illegible]	[illegible]	[illegible] 90				good
		[illegible]	-[illegible]		[illegible]	[illegible]	90-90-[illegible]				good.
							[illegible]				
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible] D'19 / 7 July 1971	

Date Wed-Thus July 7-8/71 **Observer** HB-JM **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34758	HD158749	$15^h 28^m.6$	$-31° 42'$	G12	IIaO	13/15	81°F	20 50	20 54	A
34759	"	"	"	"	"	"		20 56	21 00	B
34760	HD170240	18 23.1	-36 08	"	"	"		21 09	21 31	C
34761	HD180553	19 11.9	-27 17	"	"	"		21 35	22 03	A
34761	Focus			"	"	13	77°F			B
34761 71	calibration step wedge for plates 34758 - 34761								8 pm	

Dome Temp. 72°F H=65%

Focus

Dome Temp. 68°F H=[illegible]

Transparency Conditions Fair at start [illegible] completely Covered by 1205

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible] W	+31 34	2"	N4.2	B7	12-12	position 2 Triangulum 47	40/19	θ CrB	[illegible] FINE
[illegible] N	"	2"	"	"	12-12	"	40/30	"	SL. SPR
0211E	+6° 16	3"	V=5.7	[illegible]	8-8-8	B Bin	200/120		FINE
[illegible] 24E	+27 32	"	6.3	Brill.	8-8-8	"	200/120	Cloudy/Clearing	FINE
	[illegible]				[illegible]	[illegible]			SL. CIRRUS TO [illegible]
								Closed 0h cloud.	
								Dec clear shortly again	
now 2/90 min @ 68°F/12 [illegible]									

Date Thurs-Fri July 8-9/71 **Observer** [illegible] **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34762	HD170200	18h 22.1m	+06° 08	612	IIa O	13/15	77°F	21 07	22 05	B
34763	HD180553	19 11.9	+27 17	612	IIa O	13/15	"	22 09	22:59	C
34764	HD169578	18 20.2	+05 02	612	IIa O	13/15	"	23 05	23:59	B
34765	HD193964	20 18.0	+61 56	"	"	"	75°F	00:09	00:27	C
34766	HD18 [illegible]	19 18.7	+26 04	"	"	"		00 35	00 43	A
34767	HD170200	18 22.1	+06 08	"	"	"		00 47	01 19	B
34768	HD180553	19 11.9	+27 17	"	"	"	75°F	01 22	02 00	C
34768 "	calibration	slip	nudge for	plate.	34762 - 34768			9 July 1971		

Dome Temp. 72°F H: 72%

Focus

Dome Temp.

Transparency Conditions very hazy - scattered cloud

100

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 24E	+06° 17'	2-3"	5.7	B9III	8-8-8	B7-9 Bin	200/100	cloud	SL. WK
01 27E	+27 30	2"	6.3	B5III	8-8-8	"	200/100	hazy	U. SL WK
0022W	+05 10	"	6.5	B8V	8-8-8	"	200/100	hazy	V. SL WK
0105E	+52 15	"	5.6	B9V	8-8-8	"	200/120		FINE
0209W	+26 20	3"	4.9	B8	12-12	B Cleveland	40/20		FINE
0140W	+6 16	"	5.7	B8	8-8-8	B8-9 Bin	200/110	cloud	FINE
0132W	+27 31	"	6.3	B5	8-8-8	"	200/185	cloud - [illegible]	U. SL WK
								cloud 0215	
	1600 h / 9.0 min @ 68°F / [illegible]								

(01)

Date Fri-Sat 9/10 July 1971 **Observer** RH-TH **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34769	HD 130941	14 45.4	-15 37	5-12	IIa-D	13/15		20:42	20:44	A
34770	HD 130109	14 41.2	+2 19	"	"	"	77°F	20:51	20:53	B
34771	HD 102323	12 15.3	+37 11	"	"	13/13		20:59	21:33	C
34772	HD 102483	11 49.9	+42 02	"	"	15/15	73°F	21:43	22:39	A
34773	HD 126675	14 39.9	+52 15	"	"	"		22:44	22:48	B
34774	HD 134987	15 11.1	+19 42	"	"	"		22:[illegible]	22:[illegible]	C
34775	HD 141400	15 44.1	+12 01	"	"	"		22:59	23:59	A
34776	HD 152614	16 49.3	+10 20	"	"	"		00:03	00:11	B
34777	HD 164577	17 56.7	+1 18	"	"	"		00:14	00:24	C
34778	K Sct	18 42.1	-5 49	"	"	13/13		00:27	01:17	A
34779	HD 177178	19 58.5	+1 40	"	"	13/[illegible]		01:19	01:57	B
34780	HD 201433	21 04.4	+29 49	"	"	"		02:03	02:17	C
34781	HD 170023	18 33.5	+39 45	"	"	"		02:22	02:36	A
34782	HD 199611	20 53.5	+10 21	"	"	"		02:40	03:08	B
34783	HD 192909	20 12.4	+47 24	"	"	"		03:11	03:25	C
34784	HD 199178	19 53.8	+40 06	"	"	"		03:37	03:38	A

Dome Temp. 69°F H=57%

Focus

Dome Temp. 60 H 60%

Transparency Conditions Lots of clouds - Fair to poor
Patchy clouds - [illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 46W	-15 48	3	3.89	Am	12-12	Sp. Bin-Bl	40/18		(GUIDING) FINE
01 03W	+2 06	"	3.74	A0V	12-12	"	40/10		FINE
04 06W	+26 56	2-3	6.70	K2	8-8-8	"	200/100		FINE
[illegible]	+46 38	2"-5"	6.46	A0	8-8-8	"	200/100		SL. WK
[illegible]	+52 02	2	4.70	A1V	12-12	"	40/20		(GUIDING) FINE
[illegible]	+19 26	2	1.30	[illegible]	12-12	RV Sh.	40/26		FINE
03 04W	+12 55	2-3"	6.80	A0	8-88	Sp. Bin	400/200		(GUIDING) SL. WK
[illegible]	+10 19	3"-5"	4.30	[illegible]V	12-12	"	40/20		FINE
01 15W	+1 35	2-4"	4.42	A1V	12-12	"	40/20		V. SL. WK
[illegible]	-5 40	2-3	6.3-6.6	G0-K0	8-8-8	RV Tau/Dy	400/200	[illegible]	BROKEN SL. WK
01 47W ~~[illegible]~~	+1 54	"	5.68	A2	8-8-8	Sp. Bin-Bl.	200/100	"	FINE
00 01W	+30 11	2	5.6	A0	8-8-8	"	200/100		FINE
03 05W	[illegible]	2"-3"	4.93	A1V	12-12	"	40/20		SL. WK
01 05W	+50 41	2"	5.72	F0	8-8-8	"	300/130		FINE
02 02W	[illegible]	2	5.72	K0+A0	8-88	Atm. El.	200/160		SL. WK
02 35W	[illegible]	2	5.25	[illegible]	12-12	Sp. Bin-Bl.	200/100		FINE

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Date [illegible] Observer [illegible] Julian Day [illegible]

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34785	34 Cyg	20 43.5	+36 07	G12	IIaO	13.5		03:42	03:46	C
34785 T1	calibration	step	wedge	for	plates	34768 – 34779			12 July 71	
T2		"			34 780 – 34785				"	

Dome Temp. .....

Transparency Conditions .....

Focus .....

Dome Temp. 60°F H+50%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]	[illegible]	2"-3"	[illegible]	BCV	12-2	[illegible]	40/20		FINE
July [illegible]	MWP 2/9.0 min @		60°F/	200	KO				
"	"								

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Date 1971 July 10/11 Sat/Sun **Observer** McU-Ta **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34786	110176316	18 59.6	+38 07	G-12	IIaO	13/13.7	74°F	23 25	23 55	A
34787	110171550	18 30.4	+29 48	"	"	13/13.5	70°F	00 00	00 48	B

Dome Temp. 62°F 60% RH

Transparency Conditions Very hazy

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 06E	+33 19	2"	5.7	B-7	8-8-8	[illegible]	400/250		(GUIDING) FINE
01 10W	+34 49		8.00	100EE	5-	SSV	300/10	Clouds (cut off)	

Date [illegible] **Observer** [illegible] **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34788	HD139892	15 35.6	+26 59	6-12	IIa0	13/0.5	72°F	20 54	21 02	A
34789	HD 141337	15 47.5	+28 18	"	"	13/0.5		21 07	21 39	B
34790	HD 144227	16 00.0	+25 30	"	"	13/0.3	71°F	21 42	22 42	C
34791	HD145457	16 06.8	+27 01	"	"	"	71°F	22 45	23 25	E
34792	HD166842	18 07.4	+25 32	"	"	"	63°F	23 27	00 16	C
34793	HD175318	18 54.6	+39 07	"	"	13/0.7	66°F	00 22	00 33	A
34794	HD183399	19 24.3	+29 14	"	"	13/0.3		00 42	01 17	B
34795	HD190228	19 58.9	+28 02	"	"	"	65°F	01 21	02 11	A
34796	HD214680	21 24.9	+28 09	"	"	"	64°F	02 13	02 47	B
34797	HD210925	22 08.6	35 26	"	"	"		02 53	03 24	A
34798	HD221354	23 46.5	+29 07	"	"	"		03 27	03 55	C
34798 F1	Focus			"	"	13	63°F			B

Dome Temp. 53°F H=57%

Transparency Conditions Excellent

Focus

Dome Temp. 58°F H=60%

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
52	1	00 23W	+36 49		5.1	B7V	2-2	SKB-52	300/120		SL STR
39	1	00 50W	+13 20	2-3	6.4	B8Iape	12-12	R.C.B-78F	200/130		FINE
42	1	01 39W	+25 26	2"	8.24	G8V	8-8-8	SSV	300/340		
35	1	02 15W	+26 56	2-3"	8.17	K0III	8-8-8	"	330/330		FINE
2	1	00 25W	+25 38	"	8.14	K1III	8-8-8	"	800/320		FINE
44	1	00 40W	+38 13	"	5.7	B6-7	8-8-8	SKB-67	400/120	field drawn	FINE
3	1	00 49W	+29 29	1"-2"	8.04	K1III	8-8-8	SSV	300/340		FINE
11	1	01 04W	+28 13	2"	8.36	G5V	8-8-8	"	800/300		FINE
47	1	00 20W	+28 35	1-2"	8.14	K1III	8-8-8	"	300/300		FINE
34	1	00 13W	+25 55	3"	8.05	K0III	8-8-8	"	400/150		FINE
5	1	00 35E	+28 37	"	7.02	K0III	8-8-8	"	400/150	cut plate by [illegible]	FINE
		[illegible]	[illegible]	[illegible]			5/2	no filter		Clear:	GOOD
										plates in same box	
										as Saturday night	

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Date [illegible] **Observer** [illegible] **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34799	HD 134737	14 11.1	+19 [illegible]	[illegible]	IIa-O	[illegible]		20:34	[illegible]	A
34800	HD 130841	14 45.4	[illegible]	"	"	"		20:46	20:50	B
34801	HD 130[illegible]	[illegible]	[illegible]			"		20:5[illegible]	21:05	C
34802	HD 141458	15 44.1	+13 01	"	"	"		21:08	21:54	A
34803	R C, B	15 44.4	+28 28	"	"	"	69°F	21:57	22:37	B
34804	HD 15[illegible]14	16 49.3	+[illegible] 30	"	"	"		22:30	22:40	C
34805	HD 147777	17 57.7	+1 18	"	"	"		22:42	22:52	A
34806	HD [illegible]	18 [illegible]	+1 40	"	"	"		22:55	00:21	B
34807	HD 201453	21 04.4	+27 48	"	"	"		00:26	01:00	C
34808	HD [illegible]	20 09.7	+14 59	"	"	"		01:04	01:08	A
34809	HD 204582	21 26.3	+11 42	"	"	"		01:12	01:30	B
34810	HD 189178	19 53.8	+40 06	"	"	"		01:35	01:43	C
34811	HD [illegible]	19 45.0	+32 11	"	"	"	65°F	01:46	02:06	A
34812	Focus			"	"	13	"			B

Dome Temp. [illegible]

Transparency Conditions [illegible]

Focus [illegible]

Dome Temp. [illegible]

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		01 23W	+19 20	3	[illegible]	[illegible]	12-12	[illegible]	40/24		FINE
		[illegible] N	[illegible]	2-3	2.79	[illegible]	12-12	Sp. Bl. Pl.	40/20+	Cloud	FINE
05		01 23W	[illegible]	2"	3.74	A0V	12-12	"	40/20	"	SL. WK
54		01 10W	+12 55	2	6.80	A0	8-88	"	400/210	NUMBERS HARD TO MAKE OUT	SL. WK
		[illegible] W	+28 21	2-3"	6.4	F8 [illegible]	8-8-8	RC + R-JOF	200/120		FINE
09		00 50W	+10 18	2-3	4.30	[illegible]	12-12	Sp. Bl. Pl.	40/20	Cloud	FINE
10		00 05E	+ 1 34	2"	[illegible]	A1V	8-8-8	"	40/20		FINE
11		00 23W	+ 1 53	2-3"	[illegible]	A2	8-8-8	"	200/100	Clouds 22:[illegible]-22:55	SL. WK
00		01 05E	+ 30 11	"	[illegible]	A0	8-8-8	"	200/100		GUIDING FINE
		00 02E	+15 12	"	[illegible]	A2V	8-16	"	80/40		V. SL. WK
		[illegible] E	+ 12 05	1-2	[illegible]	[illegible]	8-8-8	"	200/100		V. SL. WK
		[illegible] W	+ 40 22	1-2	[illegible]	[illegible]	8-8-8	"	200/100		FINE
06		01 23W	+ 33 26	1-2	[illegible]	[illegible]	8-8-8	"	400/200	Cloud at [illegible]	FINE
							3-3	[illegible]		Closed up	GOOD

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Date [illegible] **Observer** [illegible] **Julian Day** [illegible]

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34812	HD 197572	20h 34.3	35° 12.6	16-12	[illegible]	91.5	69°F	0h 52	01 48	A
34813	HD 187929	19 47.4	+00 45	"	"	"		1h 54	02 04	B
34814	T Vul	20 47.2	+27 63	"	"	"	68°F	2 16	02 42	C
34815	S. Sge	19 51.5	+16 22	"	"	"		2h 46	[illegible]	A
34816	[illegible]	[illegible]	[illegible]					[illegible]	03 31	B
[illegible]	HD 206778	21 39.3	+9 25	"	"	"		[illegible]	[illegible]	C
34829 T1		Note	34799 – 34803, 34812 – 34817							
T2			34818 – 9, 34804 – 11							
T3			34820 – 34829							

Dome Temp. 50°F H=66%

Transparency Conditions Excellent after 0:30 1/2

Focus

Dome Temp.

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
8		00 14W	35°24	2-3	[illegible]	[illegible]	[illegible]	Spted (Pb)	60/260	[illegible]	SL. WK
4		01 20W	40°00'	2"	+.05-5.25	F6½-G4½	8-8-8	"	40/27		SL. WK
2		01 00W	+28 14	"	5.82-6.82	F5½-G0½	8-8-8	"	200/130		FINE
	A	[illegible]	+41 39	2-3"	5.87 7.02	F6½ G6½	8-8-8	"	200/[illegible]	[illegible]	J. SL. WK
1		00 11W	+58°20	2"	[illegible]	[illegible]	12-12	"	40/26		FINE
	C	[illegible]	+0° 49	3"	3.98	K2½	5-12	Spted	40/[illegible]		SL. WK
		mwr-2/9.0 min @ 68°F / 2900 RPM									
				"							
				"							

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Date 14/15 July Wed/Thurs **Observer** HS - Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34818	HD170200	18h 23.1m	+06° 05'	G12	IIa O	13/5	69°F	20 47	21 09	A
34819	HD180553	19 11.9	+27 17	"	"	"		21 12	21 46	B
34820	HD169578	18 20.2	+05 02	"	"	"		21 50	22 32	C
34821	R Cr B	15 44.4	+28 28	"	"	"		22 37 36	23 13	B
34822	HD193964	20 18.0	+61 56	"	"	"	67°F	23 21	23 39	C
34823	HD186791	19 41.0	+10 22	"	"	"		23 44	23 48	A
34824	HD170200	18 47.5	+13 51	"	"	"		23 51	00 27	B
34825	HD183399	19 24.3	+29 14	"	"	13/3		00 32	01 21	C
34826	HD170200	18 23.1	+06 03	"	"	13/5	64°F	01 28	01 58	A
34827	HD180553	19 11.9	+27 17	"	"	"		02 01	02 45	B
34828	HD193964	20 18.0	+61 56	"	"	"		02 48	03 06	C
34829	HD219799	23 13.2	+44 57	"	"	"		03 09	03 29	A
34829F1	Focus						63°F			B

Dome Temp. 62°F / H = 64%

Focus

Dome Temp. 59 / 61%

Transparency Conditions very good - some cloud on horizon

Doc Clamp - [illegible] to move w/ [illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0206E	+06 18	2-3"	5.7	B8III	8-8-8	B8-9 Binary	200/120		FINE
0218E	+27 30	"	6.3	B5III	8-8-8	"	200/120		FINE
0245E	+5 10	"	6.5	B8V	8-8-8	"	200/105		SL. WK
0238W	+22 20	"	6.4	F8Iap	8-8-8	PCrl 10F	400/260		SL. WK
0130E	+62 14	2"	5.6	B9V	8-8-8	B8-9 Binary	200/120		FINE
[illegible]	+10 38	"	3.5	KIII	12-12	Std Vel.	40/28		SL. WK
0248W	+14 02	"	6.1	B8V	8-8-8	B8-9 Binary	200/120		FINE
0106W	+29 30	"	8.04	K1III	8-8-8	S5V	800/375		SL. WK
0243W	+66 16	1-3"	5.7	B8III	8-8-8	B8-9 Binary	200/120	~1" miss in G	
0242W	+27 31	2-4"	6.3	B5III	8-8-8	"	200/120		FINE
0200W	+62 15	2-3"	5.6	B9V	8-8-8	"	200/120		FINE
0225E	+45 25	2"	6.27	F9p(II)	8-8-8	"	200/120		FINE
					3/3	no filter		Broken	DISCARDED
								Allson - discard [illegible]	
								Fred plate To	

Date 15/16 July 1971 Thurs/Fri **Observer** H.-Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34880	HD170200	18h 23.1m	+06° 08′	G12	IIaO	13/0.5′	70°F	20 52	21 16	A
34881	HD 180553	19 11.9	+27 17	"	"	"		21 24	21 54	B
34882	HD 193964	20 18.0	+61 56	"	"	"		22 07	22 31	C
34883	HD169578	18 20.3	+05 02	"	"	"	69°F	23 28	23 46	A
34884	HD 186791	19 41.5	+10 22	"	"	"	"	23 32	23 56	B
34885	HD 174803	18 47.5	+13 31	"	"	"	68°F	00 00	00 [illegible]	C
34886	HD 170200	18 23.1	+6 08	"	"	"		00 37	00 58	A
34887	HD 180553	19 11.9	+27 17	"	"	"		01 09	01 38	B
34888	HD 169578	18 20.3	+05 02	"	"	"	68°F	01 42	02 32	C
34889	HD 193964	20 18.0	+61 56	"	"	"		02 37	03 01	B
~~348~~										
34839 T1	~~Tum~~ Test of 150 g/mm grating mounted for 40 A/mm blue.									B
34839 T2										

Dome Temp. 64°F / H=64%

Focus .....

Dome Temp. 60 83

Transparency Conditions Fair — scattered clouds

cloud = 37.79-

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Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 56E	+06 19	1"-2"	5.7	B8III	8-8-8	B8-9 Binary	200/130		FINE
02 05E	+22 30	"	6.3	K5II	8-8-8	"	200/120		FINE
02 40E	+[illegible] 15'	~1"	5.6	B9V	8-8-8	"	200/120		(slightly cloudy) FINE
00 08W	+5° 10'	"	6.5	B9V	8-8-8	"	200/130	cloud	FINE
01 04E	+10 40	"	3.9	K3II	12-12	std vol	200/170	cloud	FINE
00 51W	+11 32	1"-2"	6.1	B9V	8-8-8	B9-9 Binary	200/120	cloud	FINE
01 42W	+06 17	"	5.7	B8III	8-8-8	"	200/120	(")	FINE
01 40W	-27 31	-	6.3	B8III	8-8-8		200/120		FINE
03 29W	+35 10	2"	6.1	B9V	8-8-8	"	200/100		SC WIR
01 58W	+62° 15'	2"-5"	5.6	A9V	8-8-8	"	200/120		FINE
1 July 1971 - Nova 219.0 mins @ 5.5° [illegible]									
					20 s.			(4 min in 7-19)	only 1 exp. [illegible]
					12 s			" " "	[illegible]

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Visitors: Dy + Chambers

Date Sat Sun July 17-18/71 Observer Ben Hal Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34840	HD190228	19 58.9	+28 02	G 42	IIaO	13/3	[illegible]	23 42	00:08	A
34841	HD187320	19 44.2	+19 34	"	"	"		00:14	00:30	C
34842	R Sct	18 42.1	-5 42	G-1	"	13/3		00:56	01:39	A
34843	AC Her	17 [illegible]	+31 48	"	"	"		01:40	03:30	E
34844	HD201433	21 04.4	+29 48	"	"	13/5	[illegible]	02:53	03:19	A

Dome Temp. 54° H=54%

Transparency Conditions Excellent

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Focus

Dome Temp. 49°F H=76%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 30 E	+23 37	3-4	8.36	G5IV	3-3-3	SSV	[illegible]	[illegible]	SL. WK
00 07 W	+19 41	3-4	7.6	B2	3-3-3	S, Bl-Bl	120/80	Broken 3 pcs.	SL. WK
18 47 W	-5 41	3-5	6.5-7.6	G0-K0	1-1-1	F V Tauley	400/400		WEAK
19 35 W	+21 57	3-4	[illegible]	F0	2-2-8		800/340	Cut short [illegible]	SL. WK
06 04 W	+30 10	"	5.6	A0	1-8-1	S, Bl-Bl	200/100		SL. WK

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Date Sun-Mon July 18-19/71 **Observer** B.L.-T.M. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34845	HD130841	14 45.4	-15 38	G12	IIaO	13/15	66°F	21:30	21:44	A
	Later 34840 – 34842, 34844, 34845									
	34843									

Dome Temp. 60° H=53%

Focus

Dome Temp.

Transparency Conditions Cloudy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 22W	-15°48'	2-3'	274	Am	12-12	[illegible]	200/115	[illegible]	sl. wk
20 July 1971									
NWC 2/9.0 min @ 68°F / 2400 / 1K0									
" 15		"			"				

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NEWTONIAN

Date Jan 19-20/71 Observer NR Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34846	NGC 5704	15 17.3	+02 12	Newt	103aO	2441152	~~617~~	21 47	21 50	1
47	[illegible]	17 24.2	-5 02	"	"		~~632~~	22 06	22 14	2
48	6635	18 02.3	-0° 18'				~~643~~	22 20	22 32	1
—	6256	17 21.9	-17 47					—	—	
—	6793	16 15.3	-23°54'					—	—	
49	KA 61	17 01.6	27.51		103aO		~~677~~	23 14 12	23 15 12	1
50	"	"	"		"		~~678~~	23 16 14	23 17 14	2
51	"	"	"		"		~~682~~	23 22 55	23 22 55	1
52							~~685~~	23 24 44	23 24 44	2
53		"			"		~~687~~	23 28 15	23 31 15	1
54							~~691~~	23 35 25	23 36 25	2
55							~~695~~	23 38	23 43	1
56							~~700~~	23 45 10	23 50 10	2
57							~~706~~	23 52	00 00	1
58							~~712~~	00 02	00 10	2
59							~~720~~	00 12 44	00 22 44	1

Dome Temp. 56° H = 86%

Transparency Conditions Hazy

Focus

Dome Temp.

Hour Angle End	Declination (Developer)	Seeing (Grid)	Ptg. Mag.	Sp. (Ex)	Comp.	Program (Fister)	Exp. Mtr.	REMARKS	Quality
0201W	D17	5	—	3m					
20W	"	5	—	8m		Very faint guide			
0201W	"	5	—	12m					
	—	5				Cluster invisible			
	—	5				glas invisible			
01 48W	D17	5	—	1m		V Heavy	on 8 Her		
01 48W	MWP2	5	—	1m		V			
01 53W	D17		—	2m		V			
01 53W	MWP2		—	2m		V			
0201W	D17		—	3m		V			
206W	MWP2		—	3m		V			
2 13W	D17		—	5m		V			
2 20W	MWP2		—	5m		V			
2 30W	D17		—	8m		V			
2 40W	MWP2		—	8m		V			
2 52W	D17		—	10m		V			

NEWTONIAN

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Date ..... **Observer** ..... **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
	K A 61	17 21.6	29 61		103.0	1152.	~~725~~			2
		21 43.6	49 02		103.0		~~739~~			1
34862		18 02.3	-00 18	"	103.0		~~758~~	0106	0118	2
63	6712	18 51.3	-03 48		"		~~766~~	0122 20	0130 21	1
64	6838	19 52.2	+18 46	"	"		~~777~~	0136 30	0140 25	2
65	7078	21 28.6	+12 02	"	"		~~794~~	0158 40	0206 40	1
66	7076	"	"	"	"		~~814~~	0228 30	0236 33	1
67	7089	21 31.9	-00 58	"	"		~~821~~	0241 48	0242 18	2
68	6838	19 52.2	+18 30	"	"		~~828~~	0250 45	0254 45	1
69	7078	21 28.6	+12 02	"	"		~~838~~	0303 20	0311 20	2

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions ....Excellent....

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
		2 55W	MWP2	CT	—	2		V			
	1	[illegible]	D19	CT	—	8m		B			
9	2	2 47W	"	S	—	12m		NIL			
"	1	2 11W	"	S	—	8		NIL		(very dark background)	
	2	3N9 W	"	S	—	4m		NIL			
6 00	1	0010W	"	CT	—	8m		B			
	1	0040W	"	"	—	8		"			
	2	0042 W	"	"	—	30 sec		"		UNGUIDED	
	1	0235W	"	"	—	4		"			
	2	0115W	"	"	—	8		"			

Carson - Develop all but 6 of the plates in D19. At the end of the list 6 plates are isolated. They are to be developed in MWP2 (Four). If you have any questions, phone me at [illegible]-3049. Also don't forget to put the complete notes on the plates.

NEWTONIAN

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Date Tues-Wed July 20-21 1971 **Observer** S Ce Tn McU Salman, Shara **Julian Day**

Plate No.	Object	R.A. ~~1900~~ 1971	Declination ~~1900~~ 71	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34870	NGC 5904	15 17.0	+02 12	Newt	103aO	1153,	~~64~~	21 39 00	21 42	1
34871	" 6366	17 26.2	-5 02	"	"		~~621~~	21 49 45	21 57 45	2
34872	6535	18 02.3	-0° 18	"	"		~~630~~	22 02 10	22 12 10	1
34873	6093	16 15.3	-22° 54'	"	"		~~643~~	22 22 20	22 28 20	2
34874	5904	15 17.0	+02° 12	"	"		~~653~~	22 38 10	22 41 10	1
34875	KA #61	17 01.6	+29 51	"	103aD		~~670~~	23 04 14	23 05 14	2
34876	"	"	"	"	"		~~673~~	23 08 30	23 09 30	1
34877	"	"	"	"	"		~~676~~	23 13 05	23 15 05	2
34878	"	"	"	"	"		~~680~~	23 19 15	23 20 15	1
34879	"	"	"	"	"		~~685~~	23 24 27	23 29 27	2
34880	"	"	"	"	"		~~690~~	23 31 35	23 35 35	1
34881	"	"	"	"	"		~~697~~	23 39 40	23 47 40	2
34882	"	"	"	"	"		~~705~~	23 51 31	23 59 31	1
34883	"	"	"	"	"		~~714~~	00 01 30	00 13 30	2
34884	"	"	"	"	"		~~724~~	00 16 00	00 28 00	1
34885	NGC 7073	21 23.6	+12 02	"	103aO		~~737~~	00 37 40	00 45 40	2

Dome Temp. 60°F H. 76%

Focus

Dome Temp.

Transparency Conditions Excellent - some cloud

Cloud in first half hour

126

Time T.	P.H.	Hour Angle End	Developer ~~Declination~~	Guider ~~Seeing~~	Ptg. Mag.	Ex ~~Exp.~~	Comp.	Filter ~~Program~~	Exp. Mtr.	REMARKS	Quality
12	1	0200W	D19	CT	—	3 min		Nil		Coutts guiding	
7	2	0007W		S	—	8 min		"		S	
2	1	0015E		S	—	10 min		"		S	
2	2	0149W		S	—	6 m		"		Pick Saturn guiding	
4	1	0300W		CT	—	3 min		"			
5	2	0140W	D19	CT	—	1 min		B V		Focus Star SMER	
9	1	0143W	MWP2	"	—	1 min		B V		wrong filter recorded	
5	2	0149W	D19	"	—	2 min		B V		V filter was used	
2	1	0154W	MWP2	"	—	2 min		B V		corrected Nov. 16, 1971	
2	2	0202W	D19	"	—	4 min		B V			Coutts
5	1	0209W	MWP2	"	—	4 min		B V			
7	2	0222W	D19	"	—	8 min		B V			
9	1	0233W	MWP2	"	—	8 min		B V			
3	2	0247W	D19	"	—	12 m		B V			
3	1	0302W	MWP2	"	—	12 m		B V			
3	2	0107E	D19	"	—	8 m		B V			

Cont. H2 NEWTONIAN

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Date ..... **Observer** ..... **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34886	NGC 6585	18 02.3	-0 18	NEWT.	103aO	1153,	~~756~~	01 02^{02}	01 14^{02}	1
34887	NGC 6656	18 34.5	-23 57	"	"		~~766~~	01 21^{04}	01 25^{04}	2
34888	6712	18 51.3	-8° 48'	"	"		~~776~~	01 34^{00}	01 42^{00}	1
34889	6838	19 52.2	+18 40	"	"		~~785~~	01 49^{03}	01 53^{03}	2
34890	7078	21 28.6	+12 02	"	"		~~799~~	02 06^{55}	02 14^{55}	1
34891	7089	21 31.9	-00 58	"	"		~~806~~	02 20^{15}	02 21^{00}	2
34892	7078	21 28.6	+12 02	"	"		~~812~~	02 25^{04}	02 33^{04}	1
34893	6838	19 52.2	+18 40	"	"		~~821~~	02 39^{53}	02 43^{53}	2
34894	7078	21 28.6	+12 02	"	"		~~841~~	03 06^{30}	03 14^{30}	1

Dome Temp. .... Transparency Conditions .....

Focus .....

Dome Temp. 56°F 74%

Time G.T.	P.H.	Hour Angle End	Developer ~~Declination~~	Guider ~~Seeing~~	Ptg. Mag.	Ex. ~~Sp.~~	Comp.	Filter ~~Program~~	Exp. Mtr.	REMARKS	Quality
		02 47W	D19	S	—	12m		nil		Focus Star & Ag/ Guiding	
25	2	02 26W	"	S	—	8m		"		Pos guiding	
42	1	02 26W	"	S	—	8m		"		Guiding	
53	2	01 35W	"	S	—	4m		"		Guiding	
14	1	00 22W	"	CT	—	8m		"		Focus Star & Pag A	
1	2	00 25W	"	CT	—	45sec		"			
33	1	00 40W	"	CT	—	8m		"			
41	2	02 27W	"	CT	—	4m		"			
4	1	01 22W	"	CT	—	3m		"			
										Mars Excellent	
										2 35mm [illegible] at 03h	
			Anson – Yes-night, 5 plates are for MWP2 and all the rest								
			D19. There is a separation between the 2 groups. Apparently,								
			the 5 for MWP2 are at the end of the box away from the								
			rubber band. CMC								

129 NEWTONIAN

Date 1971 July 21-22 **Observer** CT-S-McU-Tn SALMON **Julian Day**

Plate No.	Object	R.A. ~~1900~~ 1971	Declination ~~1900~~ 1971	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34895	NGC 5904	15 17.0	+02 12	Newt	103aO	1154.	~~599~~	21 21 25	21 24 25	2
34896	" 6366	17 26.2	-5 02	"	"		~~609~~	21 32 05	21 42 05	1
34897	" 6535	18 02.3	-0 18	"	"		~~619~~	21 47 00	21 57 00	2
34898	" 6426	17 43.5	+03 12	"	"		~~630~~	22 02 15	22 12 15	1
34899	NGC 5904	15 17.0	+02 12	"	"		~~646~~	22 29 18	22 31 18	2
34900	" 6535	18 02.3	-0 18	"	"		~~657~~	22 40 01	22 52 01	1
34901	" 6712	18 51.3	-8 48	"	"		~~667~~	22 57 00	23 07 00	2
34902	6838	19 52.2	+19 40	"	"		~~676~~	23 10 40	23 14 40	1
34903	NGC 6779	19 15.4	+30 07	"	"		~~692~~	23 32 05	23 41 05	2
34904	" "	"	"	"	103aD		~~700~~	23 43 52	23 52 52	1
34905	" 7078	21 28.6	+12 02	"	103aO		~~711~~	00 00 36	00 08 36	2
34906	" "	"	"	"	"		~~728~~	00 24 19	00 32 19	1
34907	"	"	"	"	"		~~736~~	00 35 30	00 43 30	2
34908	"	"	"	"	"		~~743~~	00 46 30	00 54 30	1
34909	"	"	"	"	"		~~751~~	00 57 03	01 05 03	2
34910	NGC 6779	19 15.4	+30 07	"	"		~~762~~	01 14 00	01 20 00	1

Dome Temp. 63°F H=71%

Focus

Dome Temp.

Transparency Conditions Hazy - Cirrus cloud

Low stratus for a while around 1hrs.

Hour Angle End	Developer ~~Declination~~	Guider ~~Seeing~~	Ptg. Mag.	Ex ~~Sp~~	Filter ~~Comp~~	Program	Exp. Mtr.	REMARKS	Quality
01 46W	D19	CT	—	3m	Nil				
00 05E	"	S	—	10m	"				
00 26E	"	S	—	"	"				
00 08W	"	S	—	"	"				
02 53W	"	CT	—	2m	"	UNGUIDED		Focus STAR β Ori	
00 29W	"	S	—	12m	"			(Didn't change much) Sgnl	
00 06E	"	S	—	8m	"			Rock gnd	
00 59E	"	S	—	4m	"			" "	
00 06W	"	CT		9m	B			Focus Star ζ Aql A	
00 17W	"	CT		9m	V				
01 40E	"	CT		8m	V				
01 17E	"	CT		8m	B				
01 06E	"	CT		8m	B				
00 55E	"	CT		8m	B				
00 43E	"	CT		8m	B				
01 44W	"	CT		9m	B				

131 NEWTONIAN
Cont'd #2

Date July 22 **Observer** **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34911	NGC 7378	21 28.6	+12 02	Newt.	103aO	1154.	~~779~~	01 37[30]	01 46[00]	2
34912	"	"	"	"	"		~~793~~	01 58[30]	02 06[30]	1
34913	NGC 6933	19 52.2	+18 40	"	"		~~802~~	02 13[30]	02 17[15]	2
34914	NGC 7089	21 31.9	−00 52	"	"		~~808~~	02 23[50]	02 24[50]	1
34915	NGC 7078	21 29.6	+12 02	"	"		~~815~~	02 30[15]	02 33[15]	2
34916	"	"	"	"	"		~~822~~	02 40[50]	02 43[50]	1
34917	"	"	"	"	"		~~830~~	02 51[20]	02 57[24]	2
34918	"	"	"	"	"		~~838~~	03 03[07]	03 11[07]	1

Dome Temp. 69°F H=75%

Transparency Conditions haze increasing toward down

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Ex. Sp.	Filter	Program	Exp. Mtr.	REMARKS	Quality
00 02 E	D19	CT		9½ m	B				
00 18 W	"	CT		8 m	B			focus changed significantly Focus [illegible]	
02 05 W	"	S		4 m	B				
00 32 W	"	S		1 m	B				
00 50 W	"	CT		8 m	B				
01 00 W	"	CT		8 m	B				
01 11 W	"	CT		8 m	B			} both plates numbered 2-7.	
01 22 W	"	CT		8 m	B				
								Path passages log on [illegible]	
							Back to Cassegrain!		

Date Fri/Sat July 23/24 '71 **Observer** Blu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34919	HD 141458	15 44.1	+13 01	6-12	Ha-O b	13/.5		21:31	22:55	A

Dome Temp. 69°F H=67%

Focus

Dome Temp. 68° 75%

Transparency Conditions Fair-Poor Haze + some clouds 1/3 X

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
55	H	02 55 W	+12 55	2-3	6.80	AO	8-8-8	Sp, Bin-Bln	400/104	Clouds Cut short	U.SC. WK
										Over-develop please	
										Closed 23:00	

Date Sun/Mon. July 25/26 '71 **Observer** Bln **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34920	HD130941	14 45.4	−15 38	G-12	IIa-0b	13/5	74°F	20:27	20:31	A
34921	HD130109	14 41.2	+ 2 19	"	"	"		20:36	20:44	B
34922	HD141458	15 44.1	+ 13 01	"	"	"	72°F	20:48	21:48	C
		= 34920, 34921							26 July '71	
		# 34919, 34922								

Dome Temp. 68° H=78%

Transparency Conditions Fair – Good (Very Hazy)

Focus

Dome Temp. 640 H=90%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 36 W	-15 55	2	2.89	Am	12-12	Sp. Bin-Blu	40/18		FINE
01 59 W	+20 6	2	3.74	A0 V	12-12	"	40/18		FINE
01 55 W	+12 54	2-3	6.80	A0	8-8	"	400/30	Placed at p. hi end of box Overdevelop plate	FINE
								Terminated by heavy fog	
								Closed 22:00	NGC 3990 3991
								Heavy fog	
Mean 2 per 9.0 min @ 68°F / 240 cifo baked									
" 15 "								"	

Date Mon/Tues. July 26/27, 1971 Observer H6 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34923	HD170200	$18^h 23^m.1$	+6° 8′	G12	IIaO	13/.5′	70°F	21 03	21 35	A
34924	HD 180553	19 11.9	+27 25′	"	"	"		21 41	22 23	B
34925	HD193964	20 18.0	+61 56	"	"	"		22 32	22 52	C
34926	HD169578	18 20.2	+5° 2′	"	"	"		23 01	00 05	A
34927	HD186791	19 41.5′	+10 22	"	"	"		00 18	00 23	B
34928	HD219749	23 13.2	+44 57					00 34	01 18	C
34929	HD170200	18 23.1	+6 8	"	"	"		01 24	01 55	A
34930	HD180553	19 11.9	+27 25′					02 00	02 36	B
34931	HD193964	20 18.0	+61 56	"	"	"		03 07	03 27	C
34931F	Focus Test			"	"		60°F			B
34931	calibration strip wedge for plates 34923-34931								27 July 71	

Dome Temp. 74°F / H=64%

Focus

Dome Temp.

Transparency Conditions fair - poor at start

[Clock need resetting] DONE Clear by 0230

'38

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 51E	+6° 18'	2-3"	5.7	B8III	8-8-8	B8-9 Binary	200/125	Clouds	FINE
00 51E	+27 30	"	6.3	B5III	8-8-8	"	200/120	(cloud)	FINE
01 27E	+62 15	3-4"	5.6	B9V	8-8-8	"	200/125		FINE
01 42W	+5° 10'	"	6.5	B8V	8-8-8	"	200/120		FINE
00 39W	+10 39	"	2.6	K3III	12-12	Std. Vel.	40/32		FINE
01 55E	+45 25	3-4+	6.7	B9p	8-8-8	B8-9 Binary	200/115		U.SC. WK
02 29W	+06 16	4	5.7	B8III	8-8-8	"	200/123		FINE
03 42W	+27 30	4+	6.3	B5III	8-8-8	"	200/120		FINE
03 11W	+62° 12'	4+	5.6	B9V	8-8-8		200/125		FINE
					3-3	no filter			GOOD
mwp=2/9.0 min @ 68°F/ 299C 161							(new mirror)		

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Date Tues/Wed. July 27/28, 1971 **Observer** HG, Kd **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34932	HD170200	18h 23m.1	+6° 8′	G12	IIaO	13/.5	65°F	20 42	21 06	A
34933	HD180553	19 11.9	+27 17	"	"	"		21 12	21 45	B
34934	HD193964	20 18.0	+61 56	"	"	"		21 53	22 12	C
34935	HD 169578	18 20.2	+5° 2′				65	22 19	23 21	A
34936	HD 187691	19 46.2	+10 10	G43	IIaO	13/.3		23 41½	23 50	C
34937	"	"	"	"	IIaO B.			23 52½	00 01½	A
34938	HD 184467	19 29.5	+58 24	"	IaO B			00 13	00 29	C
34939	"	"	"	"	IaO B	9/.3		00 36	01 08	A
34940	HD170200	18 23.1	+6 8	G12	IIaO	13/.5		01 33	02 03	B
34941	HD 180553	19 11.9	+27 17	"	"	"		02 08	03 02	A
34942	HD 193964	20 18.0	+61 56	"	"	"		03 08	03 29	C
34943	HD 3712	00 34.8	+55 59	"	"	"		03 40	03 42	A

Dome Temp. 61°F / H ≈ 60%

Focus .....

Dome Temp. .....

Transparency Conditions ~~fair but thickening at start~~ – cloud in west and north

Time T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
06	A	01 17E	+6° 17'	1"-2"	5.7	B8III	8-8-8	B8-9 Binary	200/130		FINE
[illegible]	[illegible]	01 27E	+27 31	"good	6.3	B5III	8-8-8	"	200/120		FINE
12	C	02 05E	+62 14	≤1" !!	5.6	B9V	8-8-8	"	200/125	(cloud)	(GUIDING) FINE
31	[illegible]	01 00W	+5 10	~2"	6.5	B8V	8-8-8	"	200/100	cloud	FINE
50	[illegible]	0004W	+10 26	2"	5.8	F8	3-3	Std Vel.	200/40		fine
[illegible]	[illegible]	0016W		2"	"	"	3-3-3	"	200/40		[illegible]
[illegible]	[illegible]		+18 36	3	7.5	K5	3-3-3	Std Vel	200/30	[illegible]	fine
[illegible]	[illegible]	1 40 W	"	3-4	"	"	3-3-3	"	200/30	high clouds	fine
[illegible]	[illegible]	0340W	+6° 15'	3-4	5.7	B8III	8-8-8	B8-9 Binary	200/120		FINE
[illegible]	[illegible]	0350W	+27° 31'	"	6.3	B5III	8-8-8	"	200/120		FINE
[illegible]	[illegible]	0313W	+62 16	2-3"	5.6	B9V	8-8-8	"	200/122		FINE
[illegible]	[illegible]	0054E	+56 26	"	2.2	K0III	12-12	Std Vel	20/16		FINE

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* baked plate (July 27)

Date July 29-30/71 Thurs-Fri **Observer** TA - JM **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34944	MHα 328-116	19 55.0	39 41	612	IIaO *	13/3	66°F	21:00	02:00	B
34945	HD 206778	21 39.3	+9 25	"	IIaO	13/5	"	02:26	03:02	C
34945 T1	calibration	step wedge for # 34945								

Dome Temp. 63°F H=63%

Focus

Dome Temp.

Transparency Conditions Good - scattered cloud 1½

Thick cloud by 2130

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00	E	0216W	+39°48'	2"	≈10.5	Em	8-8-8	Wat-Em Obj	800/90	some cloud	
02	C	0130W	+9 50	2"-4"	4.0	K2Ib	8-8-8	Late type	40/46	thick cloud	FINE
										need more plates	
										Tu	

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* baked July 21

Date JULY 31/1 1971 Observer Dy-Tu Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34946	R CrB	15 44.4	+28 28	G-12	IIa-O	13/.5		21:55 SD	22:47	A
34947	R Sct	18 42.1	-5 49	"	"	13/.3	67%	22:57	00:09	B
	~~AC Her~~	~~18 26.0~~	~~+21 48~~	~~"~~	~~"~~	~~"~~		~~00:0~~		
34948	HD 209540	21 24.2	+25 31	G12	IIaO	13/.3		00:30	01:30	C
34949	HD 209642	21 24.9	+28 09	"	IIaO-b	"	65%	01:32	02:16	B
34950	HD 210925	22 08.6	+25 26	"	"	"		02:19	02:50	C
34951	HD 216723	22 50.1	+27 28	"	"	"		03:00	04:02	A
34952	α Cet	00 38.6	-18 32	"	"	13/.5	64%	04:07	04:19	B

Dome Temp. 61°F H=64%

Focus

Dome Temp. 58°F H=76%

Transparency Conditions Clear by 10:30
some cloud & haze

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
12		3h 19W	+28 15	2"-4"	6.4	F8	8-8-88	R CrB	200/130	*	
29	B	01 43W	-05 40	2	6.3-8.6	G0-K0	8-8-8	RV Tau-Dy	400/250	balance ?	WEAK
			~~+21 55~~		~~7.4-9.6~~	~~F2-K4~~	~~8-~~			too faint.	
30	C	0020W	+25 54	2"	8.44	K2 III	4-4-4 4-4-4	S SV	800/430		SL. WK
16	B	01 07W	+28 33	2-3"	8.14	K2 III	8-8-8	"	800/350		U. SL. WK
50	C	01 02W	+25 52	"	8.05	K0 III	8-8-8	"	800/350		U. SL. WK
2	A	01 22W	+27 54	2"	8.36	G8 III	8-8-8	"	800/350	broken spc	FINE
1	B	[illegible] 14E	-12 05		3.06	K1 II	12-12	std vel	40/28		FINE
										Fe + *	
										* ~~[illegible]~~ LINES ARE	
										DOUBLED	

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* baked July 27

Date Sun/Mon Aug 1/2 '71 **Observer** B/n-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34953	HD130109	14 41.2	+ 2 19	G-12	IIa-O*	13/.5	78°F	20:37	20:49	A
34954	HD152614	16 49.3	+ 10 20	"	"	"		20:54	21:08	B
34955	HD141478	15 44.1	+ 13 01	"	"	"		21:12	22:08	C
34956	HD164577	17 56.7	+ 1 18	"	"	"		22:11	22:17	A
34957	HD187549	19 45.0	+ 33 22	"	"	"		22:34	23:08	B
34958	HD170073	18 22.5	+ 59 45	"	"	"		23:14	23:24	C
34959	HD189178	19 53.8	+ 40 06	"	"	"	67	23:26	23:40	A
34960	HD177178	18 58.5	+ 1 40	"	"	"		23:44	00:16	B
34961	HD195965	20 29.3	+ 47 53	"	"	"		00:19	00:57	C
34962	HD198183	20 43.5	+ 36 07	"	"	"	66°F	01:00	01:04	A
34963	HD199611	20 53.3	+ 30 21	"	"	"		01:09	01:31	B
34964	HD201433	21 04.4	+ 29 48	"	"	"		01:35	01:53	C
34965	TX Psc	23 41.3	+ 2 56	"	"	"		01:57	03:03	A
34966	HD230057	23 15.7	+ 60 36	"	"	"		03:10	03:48	B
34967	HD22[illegible]	23 [illegible]	+ [illegible]	"	"	"		03:53	03:59	C
34968	HD210418	22 05.2	+ 5 92	"	"	"	63°	04:02	04:06	A

Dome Temp. 63°F H=71%

Transparency Conditions Fair - Poor (Cirrus Clouds) 46

Focus

Dome Temp. 59°F H=88% Dripping Dome

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
49	L	02 25 W	+2 07	3	3.74	A0 V	12-12	Sp. Bin-Blu	80/34	cloud	SL. WK
01	L	00 39 W	+10 20	3	4.30	B6 V	8-8-8	"	80/36		FINE
01	C	02 42 W	+12 55	2	6.80	A0	8-8-8	"	400/180	Capped 21.25 - uncapped 21.31	SL. WK
17	A	00 40 W	+01 24	"	4.46	A1 V	12-12	"	40/17		FINE
01	B	00 17 E	+33 24	2-3'	6.66	B0.5 V	8-8-8	"	400/180		FINE
24	[illegible]	01 22 W	+58 51	2	4.93	A1 V	12-12	"	40/16		FINE
49	[illegible]	00 07 W	+40 21	1-2	5.35	B5 V	8-8-8	"	200/90		FINE
16	B	01 37 W	+1 52	2	5.68	A2	8-8-8	"	200/90		FINE
07	[illegible]	00 49 W	+48 11	1-2"	6.22	B2	8-8-8	"	400/180		(GUIDING) SL. WK
[illegible]	[illegible]	00 45 W	+36 26	1-2	4.42	B5 V	12-12	"	40/17		(GUIDING) FINE
31	[illegible]	01 00 W	+10 42	1-2	5.72	F0	8-8-8	"	200/105		FINE
12	C	01 02 W	+30 09	2	5.6	A0	8-8-8	"	200/90		FINE
13	A	00 19 E	+3 25	2-3	6.9-7.7	C6₂	8-7-8	Tc Search	400/450	[Focus Wire 34.58 F - 63°F] good	WEAK
7	[illegible]	00 52 W	+61 03	2	[illegible]	B5	8-8-8	Sp. Bin. - Blu	400/180		
59	C	00 43 W	+5 12	1-2	[illegible]	F7 V	8-8-8	RV Std.	40/45		FINE
[illegible]	[illegible]	02 19 W	+6 10	2	[illegible]	A2 V	12-12	Sp. Bin. Blu	40/16		FINE

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Date Aug 2/3 '71 **Observer** Ht - Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34969	ε UMi	16 56.2	82° 02	G-12	IIaO band	6/.5	74°F	20:35	21:11	A
34970	HD 179094	19 06.1	+52 16	"	"	"	73°F	21:22	22:50	B
34971	HD 209213	22 01	+46° 45'	"	"	6/.3	71°F	23:04	01:39	C
34971 T1	Calibrati	step wedge			IIaO band		Aug 3	0h15T		
34971 F	Focus			G12	IIaO	6	71°F			E
	plates 34946 - 34970							4 August 1971		
	34971 - 71F1									

Dome Temp. 67°F H=70%

Focus

Dome Temp.

Transparency Conditions thin cloud - but good
Cloud thick by 00h

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
11	A	00 45 W	82° 05'	1"	4.23	G5	8-8-8	H-K5:n - Ht	200/160	early (narrow slit + UV filter)	
50	B	00 08 W	52 25	"	V=5.8	K1 IV	8-8-8	"	200/160	" " "	v sl. wk
19	C	00 03 W	47 5'	2"	6.5	K0 III	8-8-8	"	800/240	" but cloud brightening, also	weak
	C		UV filter				3/3	no filter		Anson, please don't develop the four plates above until I talk with you. I will be at DDO this aft. ~4:00. Thank you. Ht	good
			Who left UV filter & slit at 6 width? I should have noticed, but it would have been wise not to trust my "keen" perception in this case.								
193		Iw w 11 2/9.0 min @ 48°F/240 C (G)									
		"	15	"		"		"			

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Date Aug 4-5/21 Wed-Thurs **Observer** West-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34972	HD 187691	19 46.2	+10°10'	G12	IIaO	13/5	67°F	20:44	21:00	A
34973	R Cr B	15h 44.4	+28° 28'	"	" "	"		21:07 30	21:37	B
34974	ADS 14893	21h 16.5	09°55'	"	" "	"		21:50	22:40	C
34975	ADS 14893	21h 16.5	09°55'	"	" "	"	64°F	22:42	23:52	A
34976	HD 222368	23 34.9	+5 05	"	"	"		23:58	00:08	B
34977	ADS 14893	21 16.5	+09 55	"	"	"	63°F	00:13	01:13	C
34978	"	"	"	"	"	"		01:16	02:06	A
34979	"	"	"	"	"	"		02:10	03:04	B
34980	HD 222368	23 34.9	+5 05	"	"	"		03:07	03:13	C
34981	1 Gem Minoris	05h 58.1m	+23°16'	"	"	"		03:20	03:44	A
34982	" "	"	"	"	"	"		03:47	04:03	B
34983	focus			"	"	13	60°F			E
34982	calibration step wedge for plate 34972 - 34982								6 Aug 21	

Dome Temp. 59°F H=62%

Focus

Dome Temp. 55°F H=80%

Transparency Conditions Excellent

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00	A	02:15 E	+10 26	2-3'	5.2	dF7	8-8-8	std vel	200/130		(GUIDING) FINE
37	B	02:23 W	+28 20	"	6.4	F8Ia	8-8-8	RC, B	200/130		(SL. GUIDING) FINE
40	C	02 06 E	+10 18	"	7.3	F8	8-8-8	sp Bin.-west	200/300	thought gain was 400, ok well	SL. wk
52	A	00 55 E	"	2'-5"	"	"	8-8-8	"	400/270		FINE
08	B	02 56 E	+5 33	2'-3"	4.3	F7	8-8-8	std vel	40/25		FINE
13	C	00 28 W	+10 18	"	7.3	F8	8-8-8	sp Bin.-west	400/280		FINE
06	A	01 25 W	"	"	"	"	8-8-8	"	400/280		FINE
04	B	02 18 W	"	"	"	"	8-8-8	"	460/270		FINE
13	C	00 10 W	+5 33	"	4.3	F7	8-8-8	std vel	40/26		FINE
4	A	05 43 E	+23 22	5'-8"	5	gF5	8-16	Sp. Bin.-West	20/20	(SLIGHT GUIDING)	FINE
03	B	05 24 E	"	4'-6"	"	"	8-8-8	"	200/130	[illegible]	FINE
		[illegible]					3/3	no filter			GOOD
										Saturn [illegible]	
		mean 2/ 9.0 min		@ 65°F		12	40 c	6.1			

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Date AUG 5-6/71 **Observer** West-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34983	R Cor Bor	15h 49.9m	+28°28'	G12	IIa-O	13/5	70°F	20:25	20:47	A
34984	HD 187691	19 46.2	+10 10	"	"	"	69°F	20:52	21:10	B
34985	ADS 14893	21 16.5	+9 55	"	"	"		21 18	22:32	C
34986	" "	21 16.5	9° 55'	"	"	"		22 34	23:30	A
34987	HD 222368	23 34.9	+5 05	"	"	"	67°	23 34	23:44	B
34988	ADS 14893	21 16.5	+9 55	"	"	"		23 48	00 38	C
34989	"	"	"	"	"	"	65°F	00 39	01 25	A
34990	HD 222368	23 34.9	+5 05	"	"	"		01 28	01 36	B
34991	ADS 14893	21 16.5	+9 55	"	"	"		01 43	02 41	C
34992	"	"	"	"	"	"	64°F	02 42	03:22	A
34993	HD 222368	23 34.9	+5 05	"	"	"		03 28	03:32	B
34994	E Cet	02h 34.5	-12° 18'	"	"	"		03 37	03:53	A
34995	1 Eri	05 58	+23° 16	"	"	"		03 59	04 11	C
34995 F1	Focus			"	"	13	63°F			B
34995 T1	calibration step wedge for plates 34983 - 34995								6 Aug 71	

Dome Temp. 62°F H=58%

Focus

Dome Temp. 57°F H=63%

Transparency Conditions Very good ... some haze

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Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
47	A	01 36W	+28° 20'	1"-2"	6.4	F8Ia	8-8-8	R C-B	200/130		FINE
10	A	02 02E	+10 26'	"	5.2	dF7	8-8-8	std vel	200/130		FINE
32	C	02 10E	+10 17	"	7.3	F8	8-8-8	Sp Bin-West	400/270		FINE
30	A	01 12E	"	2	"	"	8-8-8	"	400/270		FINE
44	B	03 16E	+5 33	4-6'	4.3	F7	12-12	std vel	40/25		FINE
28	C	00 04E	+10 18	2	7.3	F8	8-8-8	Sp Bin-West	400/275		FINE
25	A	00 42W	"	"	"	"	8-8-8	"	400/270		FINE
26	B	01 22E	+5 34	2'-4'	4.3	F7	12-12	std vel	40/26		FINE
41	C	02 00W	+10 19	2-3'	7.3	F8	8-8-8	Sp Bin-West	400/270		FINE
22	A	02 42W	"	2"	"	"	8-8-8	"	400/280		FINE
22	B	00 33W	+5 35	1-2"	4.3	F7	12-12	std vel	40/24		FINE
53	A	02 06E	-11 53	2"-3	~5	F5	8-8-8	sp Bin-West	40/27		BROKEN / FINE
11	C	05 12E	+23 22	3"	~5	965	8-8-8	"	200/130		FINE
			[illegible]				3/3	no filter			GOOD
Avg		2 WP-2	9.0 min @ 64° = 1240				1 G				

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* baked Aug 5/6

Date Aug 6-7 / 71 Fri-Sat **Observer** GH-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
34996	IC4756-1	$18^h 39.6$	$+05^\circ 22$	G43	IIaO-6*	13/.3	72°F	20:30	20:42	A
34997	"	"	"	"	"	"	"	20:43	21:07	B
34998	IC 4756-2	"	"	"	"	"	"	21:18	21:26	C
34999	IC 4756-7	"	"	"	"	"	70°F	21:34	22:42	A
35000	IC 4756-21	"	"	"	"	"	69°F	22:46	01:16	B
35001	HD 187691	$19^h 46.6$	$+10^\circ 10'$	"	"	"	68°F	1:32	1:38	C
35002	Stock 2-160	$2^h 12.5$	$+59^\circ 34$	"	"	"	67°F	1:50	2:20	A
35003	Stock 2-40	$2^h 6.1$	$+59^\circ 31.4$	"	"	"	"	2:27	3:31	B
35004	Stock 2-7	2 3.5	+59 33.4	"	"	"		3:35	3:48	C
35005	HD13854	2 09.9	+56 36	"	"	"		3:55	4:07	A
35006	HD12929	2 01.5	+22 59	"	"	"		4:13	4:14	C
35006 F1	Focus			"	"	13	66°F			B

Dome Temp. 63°F H = 59%

Focus

Dome Temp. 60°F H = 70%

Transparency Conditions CLEAR/VERY HAZY HAZER ~22 W 154

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1:14 E	+05°19	2-3	7.15	F0 Ib	3-3-3	GH Clusters	200/30		FINE
0:50 E	"	2"	"	"	3-3-3	"	200/40		FINE
0:27 E	+05 00	1-2"	6.53	[illegible]	3-3-3	"	800/120		FINE
0 47 W	+05 19	"	9.43	(K)	3-3-3	"	800/120	hazy	sc wk
3:22 W	+05 22	2"	9.34	(C)	3-3-3	"	800/111	hazy	FINE
2:32 W	+10 27	2-3"	5.8	F8	3-3-3	std vel	200/30		
3:15 E	+59 57	2"	8.2	G8	3-3-3	GH Cluster	800/120		sc wk
1:58 E	+59 53	"	8.2	(B)	3-3-3	"	800/120		FINE
1:33 E	+55°55	3-6	7.0	F5 II	3-3-3	"	200/30		FINE
1 25 E	+56°59	3-4	6.2	B1	3-3-3	std vel	200/30		FINE
1:08 E	+23°23	2-3	3.15	K2 III	5-4	"	40/ 9		
[illegible]					10/0	[illegible]			U. SC. CENTRE TO VIOLET

V [illegible] — 165
GH, Hs, LD slowed M13
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* [illegible] Aug 8/9

Date Aug 7-8/97 Sat-Sun **Observer** GH-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35007	+36°3914	18h 50.7	+36°47.4	G43	IIaO-1/2*	13/13	75°F	22:56	00:04	A
35008	+36 3315	18 50.7	+36 36	"	"	"	"	00:09	00:[illegible]	B
35009	+36 3319	18 51.0	+36 47	"	"	"	"	00:38	00:42	C
35010	+36 3319	"	"	"	"	"	"	00:44	00:50	A
35011	136 3307	18h 50.2	+36°5.1	"	"	"	73°F	00:57	01:01	B
35012	+36 3324	18h 41.9	+36°43.7	"	"	"	"	01:07	01:47	C
35013	HD 187691	19 46.2	+10 10	"	"	"	"	01:53	02:02	A
35014	Stock 2-43	2h 6.6	+58°46.4	"	"	"	71°F	02:15	03:03	B
35015	Stock 2-53	2h 7	+58°17.4	"	"	"	70°F	03:08	04:[illegible]7	C
35016 FI	Focus			"	"	13	70°F			A

Dome Temp. 68°F H73%

Transparency Conditions Hazy

Focus

Dome Temp. 64°F H=73%

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
4	A	1:57 W	+36 58	1-3"	8.74	A0	3-3-3	GH-Cluster	800/120		FINE
	B	2:25 W	+36 48	2"	7.54	B5	3-3-3	"	800/120		FINE
	C	2:14 W	+36 57	"	5.96	MA II	3-3-3	"	200/30		SL. WK
	A	2:43 W	"	"	"	"	3-3-3	"	200/60		FINE
	B	2:51 W	+37 02	2-3	5.48	(B)	5-4	"	40/6		FINE
	C	3:40 W	+36 49	1-2"	7.99	B9	3-3-3	"	800/120	[illegible]	FINE
	A	2:58 W	+10°27	1-2	5.8	F8	3-3-3	std vel	200/30		
	B	2:22 E	+59°07	"	8.8	G5 II	3-3-3	GH cluster	500/120		WEAK
	C	1:09 E	+58°40	"	8.9	(F0)	3-3-3	"	800/90	[illegible]	WEAK
	A	[illegible]					10/10	[illegible]		Arcsec! [illegible]	CENTRE TO VIOLET
										slides of the 14	
										but actually under you	
										total then add 1	
										Now we 07 → 15	
										Tu	

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* baked July 29/30

Date Sun-Mon Aug. 8-9, 1971 **Observer** Bln-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35016	HD124897	14 11.1	+19 42	G-12	IIa-O*	13/.5		20:12	20:13	A
35017	HD130109	14 41.2	+2 19	"	"	"		20:18	20:20	B
35018	HD141458	15 44.1	+13 01	"	"	"		20:25	21:03	C
35019	HD152614	16 49.3	+10 20	"	"	"		21:08	21:12	A
35020	HD164577	17 56.7	+1 18	"	"	"	79°F	21:16	21:20	B
35021	HD177178	18 58.5	+1 40	"	"	"		21:22	21:38	C
35022	HD187459	19 45.0	+33 11	"	"	"		21:42	22:02	A
35023	HD170073	18 22.5	+58 45	"	"	"		22:04	22:08	B
35024	HD189178	19 53.8	+40 06	"	"	"		22:12	22:18	C
35025	HD191610	20 05.7	+36 33	"	"	"	77°F	22:22	22:26	A
35026	HD192909	20 12.4	+47 24	"	"	"		22:32	22:38	B
35027	HD193965	20 29.3	+47 53	"	"	"		22:42	23:10	C
35028	HD199611	20 55.3	+50 21	"	"	"		23:12	23:30	A
35029	HD199183	20 43.5	+36 07	"	"	"		23:35	23:39	B
35030	HD201433	21 04.4	+29 48	"	"	"		23:42	23:54	C
35031	UU Peg	00 09.8	+8 16	"	"	"		00:21	00:53	B

Dome Temp. 21°F H=55%

Focus

Dome Temp.

Transparency Conditions Fair - Scattered Cirrus

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Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
13	A	02 48W	+19 25	2"-3"	1.30	K2IIIp	12-12	RV Std.	40/26		(GUIDING) STRONG
20	B	02 26W	+2 07	2"	3.74	A0V	12-12	Sp. Bin. - Blu	40/18		FINE
03	C	02 05W	+12 55	2	6.80	A0	8-8-8	"	400/200	1" broken off	FINE
12	A	01 09W	+10 18	2	4.30	B8V	12-12	"	40/18		FINE
20	[illegible]	00 09W	+1 24	2-3	4.46	A1V	12-12	"	40/18		FINE
38	C	00 34E	+1 53	2	5.68	A2	8-8-8	"	200/90		(GUIDING) FINE
02	A	00 57E	+33 27	"	6.66	B0.5II	8-8-8	"	400/200		(GUIDING) FINE
08	[illegible]	00 35W	+58 51	1	4.93	A1V	12-12	"	40/19		FINE
11	[illegible]	00 49E	+40 20	1	5.35	B5Vp?	8-8-8	"	200/90		FINE
06	A	00 52E	+36 49	1	4.82	B3Ve	12-12	"	40/18		(GUIDING) SL STR
38	[illegible]	00 46E	+47 32	1	5.42	K0 + A3	12-12	Atm Ecl.	40/36		FINE
10	[illegible]	00 32E	+48 12	1"-3"	6.82	B2	8-8-8	Sp. Bin - Blu	400/200		(GUIDING) FINE
30	A	00 35E	+50 42	2-3	5.72	F0	8-8-8	"	200/115		FINE
39	B	00 17E	+36 26	2"	4.42	B5V	8-8-8	"	40/18		FINE
24	C	00 22E	+30 09	2	5.6	A0	8-8-8	"	200/100		FINE
3	A	00 30E	+8 43	2"-3"	5.15	A9s	8-8-8	"	400/200		FINE

159 Pg #2

Date Cont **Observer** Ha-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35032	HD 209819	22 01.0	-14 21	G-12	IIa-0b	13/.5	75°F	00:58	01:04	C
35033	HD 204862	21 26.3	+11 42	"	"	"		01:11	01:33	B
35034	MM Psc	00 09.8	+8 16	"	IIa-0	"		01:37	02:01	A
35035	HD 206874	21 39.9	+28 20	"	"	"		02:07	02:47	C
35036	UU Psc	00 09.8	+8 16	"	"	"		02:49	03:09	A
35037	HD 2905	00 27.3	+62 23	"	"	9/.9		03:14	03:20	C
35038	HD 220057	23 15.7	+60 36	"	"	13/.5		03:24	03:52	B
35039	UU Psc	00 09.8	+8 16	"	"	"	72°F	03:55	04:15	A
	34996 - 35039:							9 Aug	1971	

Dome Temp. .....

Focus .....

Dome Temp. 64° 70%

Transparency Conditions Very good

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04	C	0011E	-13 55	2-3	4.18	B8V	12-12	Sp. Bin - Bln	40/18		
33	C	0044W	+11 12	F2"	5.93	B9V	8-8-8	"	200/100		FINE
01	A	0123E	+8 44	2-6	6.15	A9s	8-8-8	"	400/200	New Box of Plates	FINE
47	C	0154W	+28 44	3"	6.90	A9	8-8-8	"	400/200		SC. WIS
	A	0014E	+8 45	2	6.15	A9s	8-8-8	"	400/200		FINE
20	C	0036E	+62 50	1"-2"	4.30	B1Ia	12-12	McU *	80/72		FINE
02		0124W	+61 02	2"	6.82	B5	8-8-8	Sp. Bin. Bln	400/200		FINE
	A	0052W	+8 43	"	6.15	A9s	8-8-8	"	400/200		FINE
		Inv P.2/ 90 min @ 68°F					161				

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* Baked 9/10 Aug

Date Wed/Thur Aug 11/12 1971 **Observer** B/n **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35040	HD124897	14 11.1	+19 42	G-12	IIa-O*	13/.5	68°F	20:02	20:03	A
35041	HD130109	14 41.2	+ 2 19	"	"	"		20:09	20:13	B
35042	HD158704	17 25.6	-26 11	"	"	13/.5	66°F	20:19	21:19	C
35043	HD141458	15 44.1	+13 01	"	"	13/.5		21:23	22:11	A
35044	HD152614	16 49.3	+10 20	"	"	"	64°F	22:14	22:20	B
35045	HD164577	17 56.7	+ 1 18	"	"	"		22:24	22:32	C
35046	HD170073	18 22.5	+58 45	"	"	"		22:36	22:42	A
35047	HD189178	19 53.8	+40 06	"	"	"		22:48	22:56	B
35048	HD187459	19 45.0	+33 11	"	"	"	60°F	23:03	23:37	C
35049	UU Peg	00 09.8	+ 8 16	"	"	13/.3		23:43	00:07	A
35050	HD195965	00 29.3	+47 53	"	"	13/.5	58°F	00:13	00:47	B
35051	UU Peg	00 09.8	+ 8 16	"	"	13/.3		00:57	01:15	C
35052	HD198183	20 43.5	+36 07	"	"	13/.5		01:22	01:26	A
35053	HD199611	20 53.3	+50 21	"	"	"	57°F	01:30	01:58	B
35054	UU Peg	00 09.8	+ 8 16	"	"	13/.3		02:03	02:23	C
35055	HD201432	21 04.4	+29 48	"	"	13/.5	52°F	02:37	02:45	A

Dome Temp. 63° H=53%

Focus

Dome Temp.

Transparency Conditions Excellent

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g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03	4	02 49W	+19 25	5	1.30	K2IIIp	12-12	RV Std.	40/25		FINE
13	2	02 29W	+2 05	4	3.74	A0V	12-12	Sp. Bin-Blu	40/15		FINE
19	6	00 51W	-26 08	4-5	6.01	B9	8-8-8	Gl Ap + m	200/110		FINE
11	A	03 25W	+12 50	3-4	6.80	A0	8-8-8	Sp. Bin-Blu	400/180		FINE
30	3	02 28W	+10 18	3-4	4.30	B8V	12-12	"	40/15		FINE
32	5	01 32W	+1 24	3-4	4.46	A1V	12-12	"	40/15		FINE
42	4	01 20W	+58 52	4	4.93	A1V	12-12	"	40/15		FINE
5	3	00 04W	+40 21	3-4	5.35	B5Vp	8-8-8	"	80/32		FINE
37	5	00 52W	+33 25	3-4	6.66	B0.5Ib	8-8-8	"	400/180		FINE
07	A	03 04E	+8 44	3-4	6.15	A9s	8-8-8	"	400/130		FINE
17	1	01 17W	-48 12	3	6.82	B2	8-8-8	"	400/180		SL. STR
18	2	01 57E	+8 45	3-4	6.15	A9s	8-8-8	"	400/130		FINE
36	A	01 41W	+36 29	3	4.42	B5V	12-12	"	40/15	PLATE IN P.H. UPSIDE DOWN	
4	3	02 05W	+50 42	2-3	5.72	F0	8-8-8	"	200/110	Dec. Clamp on finite	FINE
53	6	00 48E	+8 44	3	6.15	A9s	8-8-8	"	400/130	Dec clamp working	FINE
	10	02 34W	+30 11	3-4	5.6	A0	8-8-8	"	200/45		FINE

12 = 2

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Date Cont. **Observer** **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35056	UU Peg	00 09.8	+8 16	6-12	IIa-Ob	13/.3		02:48	03:06	B
35057	HD 206774	21 39.9	+28 20	"	"	13/.5	[illegible]°F	03:10	04:00	C
35058	HD 2905	00 27.3	+62 23	"	"	9/.7		04:06	04:12	A
35059	UU Peg	00 09.8	+8 16	"	"	12/.5		04:17	04:33	B

Dome Temp. .....

Transparency Conditions Excellent

Focus .....

Dome Temp. 50°F H=75%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 05E	+8 45	3	6.15	A9s	8-9-8	Sp. Bin-Bla	400/130		FINE
03 20W	+28 45	3-4	[illegible]	A9+ A9	8-9-8	"	400/180		FINE
00 43W	+62 51	2-3	4.30	F1Ea	12-72	McA ★	40/23		SC. STR
01 27W	+8 45	2-3	6.15	A9s	9-8-8	Sp. Bin-Bla	400/130	Down	FINE

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22 24 EST 19 29 PT

Date Thur/Fri Aug 12/13 1971 **Observer** McU **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35060	RCrB	15 44.4	+28 28	G-12	IIaO	13/.5		20 11 26	20 37	A
35061	AC Her	19 26.0	+21 48	"	IIaO 6	13/.3	67°F	20 45	21 52	B
35060 T1	calibration step wedge for 35060									

Dome Temp. 62°F 68% = 14

Focus .....

Dome Temp. .....

Transparency Conditions Cloud in west - seeing fairly good 6
Scattered Cloud ~21"

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 55W	+23 19	~2"	6.4	F8Ia	8-8-8	JDF-RCrB	200/130		FINE
00 42W	+21 56		~8.5	F2 -K4	4-4-4 4-4-4	Dy	800/270	finder field drawn	FINE
								cut short by cloud	

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*Boxed Aug 12/13

Date Fri/Sat Aug 13/14, '71 **Observer** Bl. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35062	HD124897	14 11.1	+19 42	G-12	IIa-O*	13/.5	75°F	20:03	—	A
35063	HD141457	15 49.1	+12 01	"	"	"	[illegible]	21:32	22:52	B
35064	HD153641	16 49.3	+10 20	"	"	"		22:56	23:04	C
35065	HD162577	17 56.7	+1 18	"	"	"		23:07	23:17	A
35066	HD170474	18 [illegible]	-2 03	"	"	"		23:30	00:14	B
35067	HD170073	18 22.5	+58 [illegible]	"	"	"		00:20	00:36	C
35068	HD187459	19 45.0	+33 11	"	"	"		00:42	01:16	A
35069	HD189178	19 53.8	+40 06	"	"	"		01:20	01:32	B
35070	HD195965	20 29.3	+47 53	"	"	"		01:34	02:38	C
35071	HD201477	21 07.4	+29 47	"	"	"		02:42	03:04	A
35072	HD198[illegible]	20 45.5	+36 07	"	"	"		03:08	03:14	B
35073	LL Aq	20 [illegible]	+8 16	"	"	13/.3		03:18	03:28	C
35074	HD220057	23 15.7	+60 36	"	"	10/.5		03:42	04:12	A
35075	HD[illegible]	[illegible] 27.3	[illegible] 33	"	"	9/.7	69°F	04:17	04:23	B

Dome Temp. 68°F H=71%

Focus .....

Dome Temp. 62°F H=82%

Transparency Conditions Fair - very poor
Good after 8h

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 57W	+19 25	1-2	1.30	K2IIIp	12-12	RV Std.	40/25	Clouds coming	FINE
04 14W	+12 55	2-8	6.80	A0	8-8-8	Sp. Bin.-Blu	400/180		WEAK
03 22W	+10 17	2	4.30	B8V	12-12	"	40/15		SC. WK
03 27W	+ 1 24	2	4.46	A1V	12-12	"	40/15		SC. WK
03 37W	- 1 56	2-4	6.72	K0III	8-8-8	"	200/90		SC. WK
03 27W	+52 52	2-4	4.92	A1V	12-12	"	20/12		FINE
03 33W	+22 26	2	6.66	B0.5Ib	8-8-8	"	400/180		FINE
03 45W	+40 24	1	5.21	F5Vp	8-8-8	"	200/90		FINE
03 16W	+48 13	1-2	6.82	B2	8-8-8	"	400/180	Clouds [illegible]	FINE
03 06W	+30 10	1-2	5.6	A0	8-8-8	"	200/90		FINE
03 27W	+36 27	1-2	4.42	B5V	12-12	"	40/15		FINE
03 24W	+ 8 44	1-2	6.15	A0	8-8-8	"	400/150		FINE
02 04W	+60 05	2	6.82	B5	8-8-8	"	400/180		FINE
01 01W	+6 [illegible]	1	4.70	[illegible]	12-12	M. [illegible]	40/25		FINE

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* baked Aug 12/13
** baked Aug 9/14

Date Sun-Mon Aug 15/16, '71 **Observer** McU **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35076	RCrB	15 44.4	+28 25	G-12	IIa Ob*	13/0.5		20 04	20 34	A
35077	HD161096	17 38.5	+04 37	"	"	"	10°F	20 37	20 40	B
35078	AC Her	18 26.0	+21 48	"	"	12/0.3	66°F	20 51	21 15	C
35079	HD190228	19 58.9	+28 52	"	"	"		21 26	00 00	A
35080	HD204042	21 24.2	+25 34	"	"	"	64°F	00 04	01 01	B
35081	HD216723	22 50.1	+27 28	"	"	"	63°F	01 06	02 12	C
35082	HD221364	23 26.5	+28 07	"	"	"		02 15	02 54	A
35083	HD2865	00 28.3	+61 23	"	"	9/0.7		03 07	03 34	C
35084	HD167	00 04	+26 00	"	IIa Ob*	9/0.3		03 45	04 26	A
35084F	Focus					9	61°F			B

Dome Temp. 62°F, H=69%

Focus .....

Dome Temp. 54°F 53% =H

Transparency Conditions excellent transparency
Air clear from SE at 2020, clouding up 0040

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 03W	+28 19	3"-4"	1.4	~~F8 T2~~	8-8-8	RCrB-JDF	400/235		
00 21W			3.93	K2 III	12-12	SpdVel	40/36	β Uph	
00 03W	+21 57	2"	7.4-9.6	F2-K4	4-4-4 4-4-4	Dy	800/350	FOGGED	
01 15W	+28 19	"	8.26	G5 III	4-4-4 4-4-4	SSV	800/350		
00 52W	+25 53	"	8.14	K2 III	4-4-4 4-4-4	"	800/350	field drift	
00 36W	+27 52	1"-2"	8.36	G8 III	4-4-4 4-4-4	"	800/350		
00 42W	+28 36	2"-3"	8.7	K1 III	4-4-4 4-4-4	"	800/350		FINE
00 20W		1"-2"	4.30	B1 Ia	8-8-8	Mr U*	40/24	dec clamp stuck in "on" position!	FINE
01 27W	+28 29	"	7.0	G9 III	4-4-4 4-4-4	SSV	800/350	"	FINE
—	filter out				3/3	no filter			BLANK

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* Baked Aug 13/14

Date Mon/Tue 16/17 Aug '71 **Observer** Bln **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35085	HD124797	14 11.1	+ 19 42	6-12	II a-06 *	13/.5	69°F	20:01	—	A
35086	HD189178	19 53.8	+ 40 06	"	"	"		20:09	20:29	B
35087	HD201433	21 04.4	+ 29 48	"	"	"		20:34	20:56	C
35088	HD164577	17 58.7	+ 1 18	"	"	"		21:01	21:09	A
35089	HD172474	18 24.5	− 2 03	"	"	"	67°F	21:14	22:00	B
35090	HD177178	18 58.5	+ 1 40	"	"	"		22:04	22:24	C
35091	HD190073	19 22.5	+ 58 45	"	"	"		22:40	22:46	A
35092	HD192459	19 45.0	+ 53 11	"	"	"		22:55	23:33	B
35093	HD191610	20 05.7	+ 36 33	"	"	"		23:37	23:43	C
35094	UU Psc	00 09.8	+ 8 16	"	"	13/.3	66°F	23:50	00:06	A
35095	HD195965	20 29.3	+ 47 53	"	"	13/.5		00:12	00:40	B
35096	UU Psc	00 09.8	+ 8 16	"	"	13/.3		00:45	00:57	C
35097	HD200771	21 39.7	+ 29 20	"	"	13/.5	65°F	01:02	01:38	A
35098	UU Psc	00 09.8	+ 8 16	"	"	13/.3		01:42	02:00	B
35099	HD189178	19 53.8	+ 40 06	"	"	13/.5		02:05	02:15	C
35100	HD204862	21 20.3	+ 11 42	"	"	13/.5		02:18	02:40	A

Dome Temp. 62°F H=63%

Focus

Dome Temp.

Transparency Conditions Very good — some g.d. haze cirrus low in north

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	0309W	+19 26	3	1.30	K2IIIp	12-12	RV Std	40/26		FINE
29	1R	0209E	+40 22	1-2	5.35	B5Ip?	7-8-8	Sp. Bin-Bin	200/85		FINE
		0230E	+30 09	1-2	5.6	A0	8-8-8	"	200/85		FINE
		0029W	-1 24	2	4.46	A1V	12-12	"	40/15		FINE
		0053W	-1 55	1-2	6.72	K0III	8-7-8	"	400/270		FINE
		0034W	+1 53	2	5.68	A2	8-8-8	"	200/80	Very low	FINE
		0148W	+58 51	1	4.93	A1V	12-12	"	40/15		FINE
		0107W	+33 25	1-2	6.66	B0.5Ib	8-9-6	"	400/160		SL. STR
		0050W	+36 52	1	4.82	B3IIe	12-12	"	40/16	Plunger is all the way out	STRONG
		0301E	+8 44	2	6.15	A9s	8-8-8	"	400/130		FINE
		0130W	+47 12	1	6.82	B2	8-8-8	"	400/180		FINE
		0154E	+8 44	1-2	6.15	A9s	8-8-8	"	400/130		FINE
		0117W	+28 39	1-2	6.30	A8-A9	8-8-8	"	400/180		
		0052E	+8 44	1-2	6.15	A9s	8-8-8	"	400/130		
		0346W	+40 34	1-2	5.00	B5Ip?	8-8-8	"	200/80		
		0232W	+12 05	1-2	5.93	G8Z	8-8-8	"	400/[illegible]		FINE

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Date Cont. Observer Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35101	UU Peg	00 09.8	+ 8 16	6-12	IIa-Db	13/3	64°F	03:44	03:52	B
35102	HD 201433	21 04.4	+ 39 47	"	"	13/5		03:06	03:20	C
35103	HD 218154	23 20.6	+ 34 02	"	"	"		03:33	03:57	A
35104	HD 2905	00 27.3	+ 62 43	"	"	9/7		04:03	04:09	B
35105	UU Peg	00 09.8	+ 8 16	"	"	13/3		04:15	04:33	C
35106	HD 140[illegible]	00 13.1	+ 36 14	"	"	13/5	64°F	04:37	04:39	A

Dome Temp. .....

Focus .....

Dome Temp. 590 H=74%

Transparency Conditions Excellent
Superb night

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Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]	[illegible]	00 11W	+8 45	1-2	6.15	A9	8-8-8	Sp. Bin-Bin	400/130		FINE
[illegible]	[illegible]	03 40W	+30 12	1-2	5.6	A0	8-8-8	"	200/85		FINE
[illegible]	[illegible]	02 18W	+24 24	1	7.01	A0	8-8-8	"	400/180		(GUIDING) FINE
[illegible]	[illegible]	00 59W	+62 50	1	4.30	B1Ia	2-12	McL *	40/14		STRONG
[illegible]	[illegible]	01 42W	+8 45	1-2	6.15	A9	8-8-8	Sp. Bin-Bin	400/130		FINE
[illegible]	[illegible]	01 15W	+36 44	1-2	4.57	A2V	12-12	"	40/16		FINE

175

* baked Aug 17 8 hrs

Date Tues/Wed 17/18 Aug **Observer** mcK **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35107	RCrB	15 44.4	+28 28	G-12	IIaO	13/0.5	73°F	20 03 24	20 27	A
35108	AC Her	18 26.0	+21 48	"	IIaOb*	13/0.3		20 32	21 20	B
35109	HD104510	17 00.8	+23 14	"	"	"	73°F	21 26	22 32	C
35110	HD204548	21 24.2	+25 32	"	"	"	72°F	22 38	23 13	A
35111	HD204642	21 24.7	+25 09	"	"	"		23 16	23 51	B
35112	HD210725	22 03.6	+25 26	"	"	"		23 55	00 26	C
35113	HD216733	22 50.1	+27 28	"	"	"	70°F	00 30	01 17	A
35114	HD221344	23 36.5	+28 07	"	"	"	69°F	01 20	01 46	B
35115	HD222133	23 52.1	+30 07	"	"	"		01 47	02 25	C
35116	HD 147	00 01.4	+23 [illegible]	"	IIaO	"		02 28	02 54	A
35117	[illegible]	00 17.0	+52 23	"	IIaO	13/0.7		03 05	03 18	B
35118	HD 4550	00 42.1	+25 11	"	IIaOb	13/0.3	68°F	03 16	04 03	C
35119	HD137	00 42.2	+29 58	"	"	"		04 07	04 39	A
35120	[illegible]					9				B

Dome Temp. 66°F H=62%

Focus

Dome Temp.

Transparency Conditions [illegible] 12

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 05W	+29 28	2"	6.4	[illegible]	8-3-3	[illegible]	200/140		FINE
[illegible] 26W	+21 56	1-2"	6.2	[illegible]	4-4-4 4-4-4	Dy	300/350		FINE
02 54W	+28 19	1"	8.11	K2 III	4-4-4 4-4-4	SSV	[illegible]/350	field dense	SL. WK
03 49E	+25 53	1"	8.44	K2 III	4-4-4 4-4-4	"	300/350	extremely faint	SL. WK
00 12E	—	1"	8.14	K2 III	4-4-4 4-4-4	"	[illegible]/350	"	
00 20E	+25 53	1"-2"	8.05	K0 III	4-4-4 4-4-4	"	[illegible]/175	"	SL. WK
[illegible] NE	+27 57	1-2"	8.36	G8 III	4-4-4 4-4-4	"	400/175		SL. WK
[illegible] 18E	+29 36	1"	7.9	K0 III	4-4-4 4-4-4	"	400/175		FINE
00 15W	+30 37	1"	8.02	G0 V	8-8-8	"	[illegible]/175		FINE
[illegible] 13W	+29 29	1-2"	7.50	G9 III	8-8-8	"	400/175		SL. WK
[illegible] 25W	—	—	4.30	B1 Ia	12-12	McU*	40/27	(SLIGHTLY) STRONG	
00 43W	+26 15	2"	8.16	K0 III	8-8-8	SSV	400/175		SL. WK
01 13W	+29 27	2"-3"	7.49	K0 III	8-8-	"	[illegible]		FINE
[illegible]	[illegible]	[illegible]			7/7	no filter			BLANK

177

* baked Aug 18 15 hrs

Date Wed/Thur 13/14 Aug **Observer** [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35120	R Cr B	15 44.4	+28 23	G12	IIaO-b	13/15		20:22	20 54	A
35121	χ C Her	17 25.0	+21 48	"	"	13/13	75°	[illegible]	21 52	[illegible]
35122	[illegible]	22 30.1	+17 23	"	"	—		22:07	23:13	C
35123	HD 221364	23 26.5	+28 07	"	"	"	74°F	23:19	23:55	A
35124	HD 222033	23 32.1	+30 07	"	"	"		23:57	01:03	B
35125	HD 167	00 01.4	+25 00	"	"	"	71°F	01:07	02:07	C
35126	HD 4550	00 42.4	+25 44	"	"	"	69°F	02:12	03:40	A
35127	HD 5187	00 48.2	+28 58	"	"	"		03:45	04:29	B
35128	HD 12929	02 01.5	+22 59	"	"	"		04:33	04:35	C
35128 II	Focus test			"	"	13	68°F			B

Dome Temp. 68° H = 62%

Focus

Dome Temp. 61° H = 72%

Transparency Conditions good [illegible]
Mo Cloud by 22h-0h

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 36W	+29 20	2"	6.4	F8 III	12-12	R C-B	400/260		Gaussian Sl. str
00 57W	+21 56	"	7.32	F2-F4	4-4-4 4-4-4	Dy	[illegible]/350		FINE
02 10E	+27 54	1½"	8.36	[illegible]	4-4-4 4-4-4	SSV	800/350	Vis [illegible]	U. Sl. unk
02 05E	+26 39	2"	7.9	K0 III	4-4-4 4-4-4	"	800/380		FINE
01 03E	+30 35	"	8.02	G0 V	4-4-4 4-4-4	"	800/350		FINE
00 27E	+28 28	2"-4"	7.50	G9 III	8-8-8	"	400/180		FINE
00 24W	+26 12	2"-3"	8.16	K0 III	4-4-4 4-4-4	"	800/370		FINE
01 07W	+29 29	1½-2"	7.49	K0 III	8-8-8	"	400/190		FINE
00 00	+23 29	2"	3.15	K2 III	12-12	std vel	40/20		FINE
[illegible]	[illegible]				3/3	no filter			FINE

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Date Thur/Fri 19/20 Aug **Observer** Tu-Ht-Shr **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35129	110205021 β Cep	21h 27m 22s	+70° 07'	612	IIaO	13/15	77°F	20:20	20:34	A
~~35130~~	"			"	"	"		~~21:14~~	—	B
35129?	calibration step wedge for 35129									

Dome Temp. 70° H=69%

Focus

Dome Temp. 70°

Transparency Conditions Very hazy

180

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03 22E	+70 25	1-2"	3.15	B2III	8-8-8	G1001-SLF	200/100		FINE
~~—~~	~~"~~	~~"~~	~~"~~	~~"~~	~~8~~	~~"~~	~~200/~~	~~Good~~	
								Closed 22:30	
mWP 2/9.0 min @ 68°F 1240 c. G1									

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Date Fri-Sat Aug 20/21 / 71 **Observer** HT-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35130	HD 179094	19 06.1	52 16	G12	IIaO	131.5	77	20:02	20:36	A
35131	HD 209813	22 01.0	46 45	"	"	"		20:44	22:04	B
~~35132~~	~~HD 213389~~	~~22 25.9~~	~~48 51~~	"	"	"		~~22:53~~		C
35132	χ And							23:31		A
~~35132~~	~~HD 209819~~	~~22 01.0~~	~~14 21~~	"	~~IIaO~~	~~13/.5~~	~~73°F~~	~~23:50~~		B
	~~HD 210418~~	~~22 05.2~~	~~+5 42~~	"	"	"				C
35131 T1	Test for plate center				Tuned grating, one full year					A
35131 T2	"					"		"	"	B

Dome Temp. 69°F H: 58%

Focus

Dome Temp.

Transparency Conditions Very good
scat cloud around 23h

182

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 57E	+52 28	2"	V= 5.8	K1 IV	8-8-8	Ca II em - Ht	200/160		v. sl wk
0223E	+47 09	"	V= 6.2	K0 III	8-8-8	"	400/360	(Trouble with Dec Clamp:	sl wk
	+49 16	"	V= 5.2	K1	8-	"	400/	Leaving Unclamped Cloud	Too Faint
									Too slow
	+13 55	3	1.18	138 V	8-	Sp. Bin - Etn	20.0/		"
			3.61	A2 V		"		Cloud - Closed	
								0:30	
	Counterclockwise		Nominal Tilt		305				
"	Clockwise of original		Tilt						

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Public night 1101 - Hs. - 1st group 88 2nd 5

Date Sat - Sund Aug 21-22/21 **Observer** **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
			next		page					

Dome Temp. .....

Transparency Conditions Photo Tow

Focus .....

Dome Temp. 60° 65% humidity

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality

185

Date Sat - Sun Aug 21-22 /71 **Observer** LAKE, Tn, Kn, SHR **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35132	5α Ceph	$21^h16^m12^s$	+62° 10′	G12	IIaD	13/.5	70°	22:48	——	A
35133	η Cep	$20^h43^m15^s$	+61°27′	G12	IIaD	13/.5	70	23:16	23:18	B
35134	5α Ceph.	$21^h16.2^m$	+62 10′	"	"	"	70	23:32	——	C
35135	NGC 7027	21^h04^m	+41°50′	G12	IIaD	171.5	70	00:00	01:30	A
35136	χ Cyg	$20^h39.5^m$	+35°14	G12	IIaO	13/.5	66	02 03	03:39	B
35137	δ Cep	$22^h25.4^m$	+57°54′	"	"	"	66	03 46	03:52	C
35138	δ Cep	$22^h25.4^m$	+57°54′	"	"	"	66	03 55	04:01	A
35139	HD 216538	$22^h48.6^m$	+39°37′	"	"	"	66	04:15	04:35	B
39F	FOCUS	TEST				13	66			B
35139 71	calibration strip wedge for plates				35130 - 35139				23 Aug 71	

Dome Temp. 60° 65%

Focus

Dome Temp. 60 62%

Transparency Conditions Excellent, then some haze

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
—	-	00 40 E	—	2"	2.6	A5	12-12	G1001 Le	40/20		(GUIDING) FINE
18	B	00 16 W	—	2"	V=3.41	K0 IV	12-12	" Kn	40/28		FINE
—	C	00 4 E	62 32	"	2.6	A5	12-12	" Le	40/17		SL. STRONG
30	A	02 15 W	42 12	2"	9	em	8-8-8	" SHT	200/77		[illegible]
39	B	04 38 W	35 35	2"	6.5	cF7	8-8-8	G1001 Le	400/250	some cloud	WEAK
52	C	03 05 W	58 21	2"	V=4.1 -5.2	F5-G2	12-12	G1001 Kn	40/29	opened side before cover replaced	FINE
01	A	03 15 W	"	2"	V=4.1 -5.2	F5-G2	12-12	G1001 Kn	40/26		FINE
55	B	03 27 W	40 06	1-2"	6.2	B8	8-8-8	G1001 Le	200/100		FINE
	6						3/3	no filter			GOOD
Guide	7.	MWD. 2/9.0 min @ 68°F/# 90 c 1G1									

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* baked Aug 20

Date Mon/Tue 23/24 Aug. '71 **Observer** Bln - Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35140	HD 124897	14 11.1	+ 19 42	G-12	IIa-0b*	13/.5		19:52	—	A
35141	HD 164577	17 56.7	+ 1 18	"	"	"		19:57	20:03	B
35142	HD 170474	18 24.5	- 2 03	"	"	"		20:05	20:37	C
35143	HD 172178	18 38.5	+ 1 40	"	"	"		20:42	21:10	A
35144	HD 170073	18 22.5	+58 47	"	"	"		21:15	21:23	B
35145	HD 187459	19 45.0	+ 33 11	"	"	"	57°F	21:26	22:00	C
35146	HD 199178	19 53.8	+ 40 06	"	"	"		22:03	22:17	A
35147	HD 191610	20 08.3	+ 36 46	"	"	"		22:20	22:26	B
35148	HD 192909	20 12.4	+ 47 24	"	"	"		22:29	22:41	C
35149	UU Psc	00 09.8	+ 8 16	"	"	13/.5	56°F	22:47	23:15	A
35150	HD 195965	20 29.3	+47 53	"	"	13/.5		23:20	23:56	C
35151	UU Psc	00 09.8	+ 8 16	"	"	13/.5		00:03	00:23	B
35152	HD 197011	20 52.3	+ 53 21	"	"	13/.5		00:27	00:51	A
35153	HD 209819	22 01.0	- 14 21	"	"	"		00:57	01:03	B
35154	UU Psc	00 09.8	+ 8 16	"	"	13/.5	53°F	01:06	01:22	C
35155	HD 206874	21 39.9	+22 20	"	"	13/.5		01:26	02:08	A

Dome Temp. 55°F H=56%

Focus

Dome Temp.

Transparency Conditions Good - scattered strato cloudy

/88

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	A	0327W	+19 26	4-5"	1.30	K2IIIp	12-12	RV std	40/27		FINE
03	A	0010E	+1 24	3-4"	4.46	A1V	12-12	Sp. Bin-Blu	40/16		FINE
37	C	0002E	-1 54	2-4	6.72	K0III	8-8-8	"	400/280		FINE
10	A	0005E	+1 54	3-4	5.68	A2	8-8-8	"	200/90		FINE
33	B	0047W	+58 50	"	4.93	A1V	8-16	"	40/16		FINE
50	C	0001W	+33 26	"	6.66	B0SIL	8-8-8	"	400/180		FINE
17	A	0009W	+40 21	"	5.35	B5Vp	8-8-8	"	200/90		FINE
36	B	0067W	+36 49	"	4.82	B3Ve	12-12	"	40/16	SL. STR	
41	C	0015W	+47 42	3	5.42	K0+ A3	8-8-8	Atm. Ecl.	200/150		FINE
15	A	0310E	+8 44	2-3'	6.15	A9s	8-8-8	Sp. Bin-Blu	200/65		FINE
54	C	0113W	+48 13	3	6.82	B2	8-8-8	"	400/180		FINE
23	C	0201E	+8 44	3-4	6.15	A9s	8-8-8	"	400/130		FINE
57	A	0143W	+50 42	3-4	5.72	F0	8-8-8	"	200/113		FINE
03	B	0046W	-13 54	3	4.8	B8V	12-12	"	40/16		
-2	C	0101E	+8 46	2	5.15	A9s	8-8-8	"	400/130		FINE
17	A	0215W	+28 14	3-4"	6.70	A0Ia	8-8-8	"	400/180		FINE

Cont pg #2

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Date ..... **Observer** ..... **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35156	UU Psc	00 09.8	+8 16	612	IIa-O	13/3		02:14	02:32	B
35157	HD 201433	21 04.4	+29 48	"	"	13/.5		02:36	02:50	C
35158	HD 213534	22 26.9	+29 02	"	"	"		02:53	03:27	A
35159	UU Psc	00 09.8	+8 16	"	"	13/3		03:31	03:51	B
35160	HD 230052	23 15.7	+60 36	"	"	13/.5		03:57	04:33	C
35161	HD 1404	00 13.1	+36 14	"	"	"		04:36	04:40	A
35162	2 Tau	03 21.8	+9 23	"	"	"		04:44	04:50	C
35162 F1	Focus			"	"	13	62°F			B

Dome Temp. .....

Focus .....

Dome Temp. 44°F H=65%

Transparency Conditions Excellent

190

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
32	[illegible]	00 08W	+8 46	3	6.15	A9s	8-8-8	Spectra	400/130		FINE
50	C	03 33W	+30 11	3	5.6	A0	8-8-8	"	200/85		FINE
27	A	03 47W	+29 29	3	6.23	A5	8-8-8	"	400/180		FINE
51	[illegible]	01 30W	+8 47	3	6.15	A9s	8-8-8	"	400/130		FINE
22	[illegible]	03 05W	+61 03	3	6.82	B5	8-8-8	"	400/180		FINE
40	A	02 13W	——	2-3	[illegible]	A2V	12-12	"	40/15		FINE
50	C	00 46E	——	2-3	3.66	B8p	12-12	"	40/16	Cloud	(GUIDING) FINE
			[illegible]				3/3	[illegible]			SX. CENTRE NO VIGNET
		NWP-2 / 9.0 min @ 60°F / 2400									

191

Date Tues-Wed 24/25 /71 **Observer** Tn-wotetio **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35163	H0161717A	11 42.5	+27 47	G12	IIaO	13/5		20:41	20:47	A

Dome Temp. 54°F H=67%

Focus

Dome Temp.

Transparency Conditions Cloudy-

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
~~55 W~~	~~27 41~~	~~1.2"~~	~~420~~	~~65 IV~~	~~12-12~~	~~Vis Em~~	40/26	then very cloudy	

193

Date Wed-Thurs 25/26/71 **Observer** Gl - Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35164	HD 135679	15 11.3	+26 01	G12	IIaO	9/5	64°	20:03	21:41	A
35165	[illegible]	24 05.5	[illegible]	G12	IIaO	9/5	63°	[illegible]	22:16	B

Dome Temp. 60° 90%

Focus

Dome Temp. 60° 91%

Transparency Conditions hazy scattered cloud

194

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
4h 35m	+25 51	1-2"	6.67	AQ?	8-9-9	Apem-51	400/30m		(GLOWING) SL. WR
00 05W	+16° 07'	2"	7.74	137	8-16	"	400/44	Cloud - complete	very weak
								WHAT HAPPENED	
								TO PLATE # 35163?	

195 Many visitors

NB*

Date Sat - Sun 28-29 Aug/71 Observer SHR, Lee, Tm Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35166	ξ Peg = HD 214923	$22^h 36.5^m$	$+10° 19'$	G12	IIaO	13.5	65°	23:33	23:51	A
35167	δ Ceph	$22^h 25.4^m$	$+57° 54'$	"	"	"	65°	00 13	0044	B
~~35168~~	~~δ Aqr~~	~~$22^h 49.5^m$~~	~~$-15° 37'$~~	"	"	"		∞		C
~~35169~~	~~χ Cyg~~	~~$20^h 35.9$~~	~~$+35° 14'$~~							

Dome Temp. 60°F 90%

Focus

Dome Temp. 60 90

Transparency Conditions hazy cloud

196

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00h 37m E	+10° 41m	2-3	3.40	B8	8-8-8	G1001	200/93		FINE
0h 26m W	+5821	"	5.20	F5-G2	8-8-8	" Km	200/120		FINE
		"	3.28	A3		"		Cloud	
								Many unexposed plates fogged due to the too humid - get water on mirror.	
					(*)	ONE OF THE ABOVE OBSERVERS HASN'T BEEN INSTRUCTED TO PUT EXPOSED PLATES BACK IN THE BOX WITH EMULSION PLINTING LEFT (THE DIRECTION OF THE ARROW); THIS COULD RESULT IN SUCH PLATES NOT BEING PROPERLY FIXED.			

197

Date Aug 29/30 1971 **Observer** G.L.T. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35168	HD 135679	15h 11m.3	+26° 01'	G12	IIaO	9/.5	73°F	19:46	21:22	A
35169	HD 191048	20h 05m.8	+15° 47'	"	"	13/.5		21:26	22:46	B
35170	HD 170200	18 23.1	+6 08	"	"	"	71°F	22 50	23:12	C
35171	HD 211474	22h 12m.2	+29° 35'	"	"	"		23:18	00:00	A
35172	HD 5342	00h 50m.2	+61° 43'	"	"	13/.5		00.11	02.03	B
35173	HD 17283	02h 41m.4	+43° 47	"	"	13/.5	58°F	02:00	03:30	C
35174	HD 26571	04h 07m.0	+52° 09	"	"	0/.5		03:40	04:16	A
35175	HH Per	00 09.5	+58 16	"	"	13/.3		04 23	04 47	C
35175 F1	Focus			"	"	13	67°F			B
35176	calibration	slip envelope for plate 35166 - 35175							30 diaphs.	

Dome Temp. 68°F H=82%

Focus

Dome Temp. 60°F H=90%

Transparency Conditions Excellent [illegible]

198

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04h 20m W	+25° 53'	2"-3"	6.67	A0	8-8-8	G1 Ap+m	400/250		FINE
[illegible] 55m W	+16° 04'	2"	7.46	B9	8-8-8	"	400/250	new bex; fl. companion ~10" above 1:1	SL. WK FINE-
02h 58m W	+6° 17'	2"-3"	5.7	B8 III	8-8-8	B8-9 Bin	200/125		FINE
00h 03m E	+30° 03	1"-2"	7.54	B8	8-8-8	G1 Ap+m	400/250		(GUIDING) SL. WK
[illegible] 36m E	61° 10	2"	7.96	A0	8-8-8	"	400/250	At [illegible] some cloud	(GUIDING) SL. WK
01 03 E	14° 08	[illegible]	7.25	B9	8-8-8	"	400/250		WEAK
01 40 E	+22° 23'	2"-4"	6.11	B9	8-8-8	"	400/250	not [illegible]	SL. WK
[illegible] 47 W	+8 44	2"-3"	6.15	A4s	8-8-8	Bin-Spin	400/160		SL. WK
					3-5	not [illegible]			GOOD
								Lost [illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			

199

* BAKED 16 HRS.

Date AUG 31 / SEPT 1 TUES/WED 1971 Observer Gz - Tn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35176	HD 153720	16 56.0	+75 34	G12	* IIaO B	13/0.5	66°F	19 40 01 05	20 30	A
35177	HD 186547	19 39.9	+13 04	"	"	13/0.5	64°F	20 38 01 50	21 02	B
35178	HD 190658	20 00.9	+15 13	"	"	13/0.5	"	21 05	22 35	C
35179	HD 192276	20 09.0	+47 26	"	"	13/0.5	63°F	22 39	23 29	B
35180	HD 199892	20 54.8	+41 33	"	"	13/0.5	"	23 32	23 50	A
35181	HD 207833	22 01.1	+28 28	"	"	13/0.5	"	23 55	00 13	B
35182	HD 216494	22 48.2	-12 09	"	"	13/0.5	60°F	00 16	01 24	C
35183	HD 225289	23 59.9	+60 45	"	"	13/0.5	"	01 29	01 55	A
35184	HD 2905	00 27.3	+62 23	"	"	13/0.7	"	01 59	02 21	B
35184 F1	Focus			"	"	13	59°F			B
~~35185~~										

Dome Temp. 60°F H-68%

Focus

Dome Temp. 52°F 70%

Transparency Conditions SOME HAZE & cloud

many jet trs is too

200

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
30	A	30 W 01 55 W	75 32	2-3"	6.84	F0	8-8-8	SPEC. BIN.	400/260		(GUIDING) FINE
02	8	33E 00 21E	13 20	"	6.1	B8IV	8-8-8	"	400/200		FINE
35	1	00 51 W	15 31	2"	6.56	M2III	8-8-8	"	400/350	thin cloud	(GUIDING) SL. WK
[illegible]	6	01 38 W	47 43	2-3"	6.6	B2V	8-8-8	"	400/200	CLOUDS	(GUIDING) FINE
50	4	01 14 W	+41 55	1-2"	6.0	B7III	8-8-8	"	400/200	"	FINE
13	5	00 38 W	+28 55	"	5.53	A0V	8-8-8	"	200/100	"	FINE
[illegible]	[illegible]	00 53 W	-11 40	2"	5.9	B9V	8-8-8	"	400/200	cloud	FINE
[illegible]	[illegible]	00 12 W	+61 13	2-3"	5.9	B7III	8-8-8	"	200/100	"	FINE
[illegible]	8	00 12 W	+62 50	"	4.30	B1Ia	8-8-8	McU *	40/25	cloud	FINE
	16		[illegible]			3/3	no filter				GOOD

201

* BAKED 16 HRS

Date SEPT 1/2 WED/THUR 1971 **Observer** GE — NANCY GE **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35185	HD 139892	15 35.6	+36 58	G12	IIa-B*	13/0.7	64°F	19 40	19 49	A
35186	HD 153720	16 56.0	+75 34	"	"	13/0.5	"	20 01	20 54	B
35187	HD 186547	19 39.9	+13 04	"	"	13/0.5	"	21 05	21 34	C
35188	HD 190658	20 00.9	+15 13	"	"	17/0.4	"	21 41	22 47	A
35189	HD 192276	20 09.0	+47 26	"	"	17/0.5	63°F	22 55	23 18	B
35190	HD 214946	22 36.7	+44 29	"	"	17/0.4	"	23 31	00 10	C
35191	HD 216494	22 48.2	-12 09	"	"	13/0.5	62°F	00 23	00 50	A
35192	HD 219634	23 12.2	+61 25	"	"	13/0.5	"	01 02	01 36	B
35193	HD 225289	23 59.9	+60 45	"	"	13/0.5	"	01 42	01 56	C
35194	HD 2905	00 27.3	+62 23	"	"	13/0.7	61°F	02 14	02 17	A
35195	HD 10260	01 35.3	+60 32	"	"	13/0.5	"	02 26	03 54	B
35196	HD 11188	01 44.9	+46 58	"	"	13/0.4	"	03 01	03 45	C
35197	HD 11291	01 45.8	+50 18	"	"	13/0.5	60°F	03 50	04 11	A

Dome Temp. 58°F H=63%

Focus

Dome Temp. 55°F H=87%

Transparency Conditions GOOD - SOME HAZE

202

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 35 W	+36 50	1-2"	5.1	B7V	8-8-8	SPEC. BIN	200/140		SL. STR
02 24 W	+75 30	"	6.84	F0	8-8-8	"	400/250		FINE
00 15 W	+13 19	"	6.1	B8V	8-8-8	"	400/200		FINE
01 07 W	+15 32	"	6.56	M2III	8-8-8	"	400/320		V. SL. WK
01 31 W	+47 45	"	6.6	B2V	8-8-8	"	400/200	HAZY	FINE
00 05 E	+44 56	"	7.12	A2	8-8-8	"	400/160	"	FINE
00 23 W	-11 39	"	5.9	B9V	8-8-8	"	400/200	"	FINE
00 45 W	+61 53	"	6.49	B8	8-8-8	"	400/200	CLOUDS	FINE
00 16 W	+61 13	"	5.9	B7III	8-8-8	"	400/200	"	FINE
00 11 W	+62 50	"	4.15	B1Ia	12-12	MU*	40/23	"	(GUIDING) FINE
00 21 E	+60 57	"	5.58	B7V	8-8-8	SPEC. BIN.	400/200	" SLOW-ECL. BIN?	FINE
00 21 W	+47 20	"	7.14	B8	8-8-8	"	400/160	"	(GUIDING) U. SL. WK
00 45 W	+50 45	"	5.62	B9III	8-8-8	"	400/200	"	FINE

203

*baked Sept 1/2

Date Tue/Wed Sept 7/8 '71 **Observer** Bln-GH/ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35198	IC 4756-7	18h 34.6m	+5° 22	6-43	IIa-O*	13/3	75°F	20:29	22:11	A
	~~IC 4756-15~~	~~18 [illegible]~~	~~+5 [illegible]~~	"	"	"		22:16		B
35199	IC 4756-1	18 24.6	+5 22	"	"	"		22:40	23:10	C
~~35200~~	~~HD 2[illegible]~~	~~19h 4.6~~	~~+31° 6~~	"	"	"		~~23:17~~		~~A~~

Dome Temp. 70° H 22%

Focus

Dome Temp. 67° H 97%

Transparency Conditions Excellent

204

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
52 19W	+05°23	2-3	9.43	K-0	3-3-3	GH Clusters	900/120		sl. wk
			9.04	A	3-	"	800/	Too Faint - Ecl?	
03 19W	+05 23	3	7.15	F0Ib	3-6	"	500/—	Exp Mtr not working	sl. wk
	+05 15	2-4	7.74	B0Ib	2-	Sp. Dist.	100/	r t short	
								too	
								Exp Meter drying chem replaced. Sept 8/71	

205

*baked Sept 1/2

Date Thurs-Fri Sept 9/10/71 **Observer** Tm-Bln **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35200	HD164577	17 56.7	+ 1 18	G-L	IIa-Ob*	13/.5	73°F	19:22	19:46	A
35201	HD170474	18 24.5	- 2 03	"	"	"		19:49	21:23	B
35202	HD170073	18 22.5	+ 56 45	"	"	"		21:28	21:46	C
35203	HD192909	20 12.4	+ 47 24	"	"	9/.5		21:49	22:27	A
35204	HD192909	20 12.4	+ 47 24	"	"	"	70°F	22:27	23:27	B
35205	HD301433	21 04.4	+ 29 48	"	"	13/.5		23:[illegible]	00:04	A
35206	HD213534	22 26.9	+ 29 02	"	"	"		00:08	00:58	C
35207	UU Peg	00 09.8	+ 8 16	"	"	13/.3	68°F	01:00	01:42	A
35208	HD1404	00 12.1	+ 36 14	"	"	13/.5		01:48	02:04	B
35209	HD2905	00 27.3	+ 62 22	"	"	9/.7		02:08	02:34	C
35210	HD21364	03 21.8	+ 9 23	"	"	13/.5		02:30	02:38	A
35211	HD22363	04 23.3	+ 16 06	"	"	13/.5		02:43	04:17	B
35212	UU Peg	00 09.8	+ 8 16	"	"	13/.3		04:21	04:55	C
35213	HD20902	03 17.2	+ 49 30	"	"	13/.5	65°F	04:58	05:00	A
35213 F1	Focus						65			B

Dome Temp. 68°F H=76%

Focus

Dome Temp. 57°F H=78%

Transparency Conditions good but hazy

26

ng Time S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
96		00 42 W	+01° 25'	2-4	4.46	A1V	8-8-8	Sp. Bin-Bln	200/91	too long - also too many stars	STRONG
23		01 53 W	-01 54	"	6.72	K0III	8-8-8	"	400/320		FINE
46		02 18 W	+57 52	1-3	4.93	A1V	8-8-8	"	200/90		SL. STR
27		01 08 W	+47 41	2	5.92	K0+A3	9-9-9	Atm, Ecl.	200/160		FINE
37		02 08 W	"	"	5.92	K0+A3	9-9-9	"	200/350		SL. STR
7		01 59 W	+30 10	"	5.6	A0	8-8-8	Sp. Bin-Bln	200/100		STRONG
58		01 24 W	+29 28	"	[illegible]	A5	8-9-8	"	400/200		SL STR
42		00 25 W	+8 45	2-3	5.15	A9s	8-8-8	"	400/140		SL. STR
14		00 44 W	36 44	2	4.58	A2V	8-9-8	"	200/90		SL. STR
11		00 50 W	+62 50	1-2	4.30	B1Ia	8-9-9	Mc W *	200/140		STRONG
38		01 51 E	+9 43	1-2	3.66	B2p	8-16	Sp. Bin-Bln	200/—	Exp. mtr. not working. Int. not discharging.	STRONG
17		01 12 E	+16 14	2	7.12	F8	8-8-8	"	400/—	Mtr. working (int. ?)	
55		03 38 W	+08 44	1-2	6.15	A9s	8-16	"	400/—		SL. STR
		00 [illegible] W	+49 50	2	3.27	F5Ib	12-12	RV Std.	40/21		STRONG
										2 pgotos # 1-3	GOOD

Sept 11 – Vulcan
54, 56, 64 – 120

207

Date Wed. / Sept. 15/16/71 **Observer** Tn-Ht **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35214	HD209813	22 01	+46°45'	G-43	IIa O	13/.3		19:30	20:12	A
35215	HD 213399	22 25.9	+48° 51'	G-43	IIa O	13/.3	65°F	20:19	21:02	B
35216	HD 216489	22 48.2	+16 19	"	"	"		21:10	21:26	C
35217	HDE 226162	19 54.6	+34 52	"	"	13/.3	62°	21:32	00:00	A
35218	HD222107	23h 32.7	+45°55'	"	"	"		00:06	00:09	B
35219	HD 4502	00 42.0	+24° 06'	"	"	"		00:15	00:21	C
35220	HD 14004	00 13.1	36 14	G12	"	13/.5	60°F	01:08	01:16	A
35221	μμ Psc	00 09.8	+08 16	"	"	13/.3		01:18	01:58	B
35222	HD2905	00 32.3	+62 23	"	"	9/.7		02:04	02:30	C
35223	HD21364	03 21.8	+9 23	"	"	13/.5		02:38	02:44	A
35223F	Focus			"	"	13	59°			B
35223U	calibration step wedge for plates 35214 – 35223									
Mon. Sept. 13/71 – Ex. Mtr Repaired										
Replaced – 5800, 6C4, 2x 6AN8A // 807, 6SJ7, 1x OC3/VR105										
	– Input Cable – Changed Dryer – t'r									

Dome Temp. 60° 69%

Focus

Dome Temp. 52 67

Transparency Conditions good but scattered cloud

208

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
12	A	02 32E	+47° 09'	3-?	7.5	K0III	8-7-0	Ca II emission binaries	800/140	← Calibration plate needed	FINE
02	B	02 07E	+49° 18'	3"-4"	7.7	K1	3-3-3	"	800/120	Someone saw a fireball!	FINE
26	C	02 05E	+16 47	"	6.7	K0	3-3-3	"	200/30		FINE
03	A	03 29W	+35 14	"	9.74	B0Ib	3-3-3	Sp. Bin-Bin	900/45	Clouds at 23:06 ½" broken off. Overdevelop. Plate at end of box	SC. WK
09	B	00 05W	+46 23	"	5.0	G8III	3-3-5	Ca II em. bin.	200/32	λ And	FINE
2	C	01 03E	+24 13	3-5	5.1-6.1	K1III	3-3-3	"	200/33	ξ And (some cloud)	FINE
16	D	00 20W	+36 42	2	4.58	A2V	8-8-8	Sp Bin-Bin	200/90		SC. STR
21	A	01 06W	+8 44	2-3	6.15	A9s	8-8-8	"	400/150	more cloud	FINE
10	C	01 19W	+62 52	2-3	4.30	F1Ia	8-8-8	McN *	200/150	"	STRONG
44	A	01 20E	+9 42	"	3.6	B8p	8-8-8	Sp Bin-Bin	80/37	"	SC. STR
	B						2/3	[illegible]			

74" MIRROR CLEANED ON FRIDAY SEPT 10, 1971

209

Date Fri-Sat Sept 17/18/71 Observer Tn - Sl - Gz (Solmon) Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35224	HD 199629	20 53.5	+40 47	G12	IIa O	131.5	59°F	22:21	22:31	A
35225	HD 219634	23 12.2	+61 25	"	"	13/0.5	"	22:59	00:39	C
35226	HD 225289	23 59.9	+60 45	"	"	13/05	57°F	01:00	01:24	A
35227	HD 11188	01 44.9	+46 58	"	"	13/.4	"	01:32	02:30	B
35228	HD 11291	01 45.8	+50 18	"	"	131.5	56°F	02:41	03:03	C
35229	HD 2905	00 27.3	+62 23	"	"	9/0.7	"	03:23	03:33	A
35230	HD 18473 N	02 53.1	+59 17	"	"	13/.5	55°F	03:43	04:47	B
35231	HD 29139	04 30.2	+16 18	"	"	"		05:02	—	C
35231 F1	Focus			"	"	13	54°F			X

Dome Temp. 54°F H=77%

Focus

Dome Temp. 50°F H=84%

Transparency Conditions bad - Scattered Cloud. bright aurora over ½ sky very good after 1^h

210

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
'31		01 05W	41 07	2-3	3.96	A0 V	8-8-8	Sp Bin - Bin	200/96		STRONG
39	C	00 54W	+61 52	3-4	6.49	B8	8-8-8	SPEC. BIN. (GZ)	400/200	Aurora SEEING VERY POOR	FINE
24	A	00 52W	+61 13	2-3	5.9	B7 III	8-8-8	" "	400/200	" better.	(GUIDING) SL. STR
30		00 10W	+47 19	"	7.14	B8	8-8-8	" "	400/160		FINE
03	C	00 41W	+50 44	2"	5.62	B9 III	8-8-8	" "	200/100		FINE
33	A	0230W	62 50	"	4.3	B1 Ia	8-8-8	McU	200/150		(GUIDING) STRONG
		01 10W	+59 25	2-3'	7.35	A0	8-8-8	Sp Bin - GZ	400/200	North following	FINE
—	C	0000	—	"	239	K5 III	12-12	std Vel	20/13		FINE
		Main / out out					3/3	no filter		Looked at Saturn	SL. CYAN TO VIOLET
										TV system gone ??	
										→ SEE NOTE	

Vondrak ~150
GH, GI, Ch

211

* baked Sept 17

Date Sat-Sun Sept 18/19/71 **Observer** Blm-Jn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35232	HDE 226868	19 54.6	+34 56	G12	IaD*	20/3		21:19	00:29	A
35233	Stroke-lam	2h12.5	+59°34	G43	"	13/3	59°F	01:06	01:30	B
35233 F1	Focus			" "		13	"			B
35234-31	calibration	sky	analyze	for	35232-3 IaD*					
T2	"	"	"		35224-231 IIaO UNBAKED					

Dome Temp. 54° H=67%

Focus

Dome Temp. 50 H=75%

Transparency Conditions Excellent
Intermittent Cirrus

212

g Time S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
31	A	54 05 W	35 13	2-3	9.74	80 5/6	7-7-7	Spbin. Cln	800/230	Aaron: Please Cali-rate separately. Overdevelop Plate & Cali. slightly	none
30	A	01 12 E	60° 00'	2"	>20	62	3-3-3	64 Cl.	800/	cut short (Cloud)	none
		unin	/ out-out				10/10	filter in	in		[illegible]
		Tw w p	2/12 min	@	65° n	/					
		"	9.0	"	"						

213

Waterloo Night

* baked Sept 12/71

Date Tue-Wed Sept. 21/22/71 **Observer** Rk-Jn-Sl **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35234	V1016 Cyg	19 55	+39 47	G-43	IIa-O*	13/0.3	61°F	19:15	22:15	A
35235	HD198134	20 43.2	+34 00	G12	"	13/5	61°F	22:43	23:03	B
35236	HD210745	22 07.4	+57 42	"	"	"		23:11	23:17	C
35237	HD 211300	22 11.1	+72 49	"	"	"		23:30	00:24	A
35238	HD 222404	23 35.2	+77 04	"	"	"	60°F	00:30	00:34	B
35239	HD 26	0000.2	+08 14	"	"	13/3		00:45	03:55	C
35240	HD 16028	02 29.4	+36 53	"	"	"		04:02	04:56	A
~~35241~~	~~HD 44033~~	~~06 14.4~~	~~+14 42~~	~~"~~	~~"~~	~~"~~		~~05:10~~		~~C~~
35241 F1	Focus			"	IIa O	13	58°			B

Dome Temp. 54°F H=63%

Focus

Dome Temp. 50°F H=75%

Transparency Conditions Excellent

2/4

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
15	0	02 03W	+39 50	1"-2"	mv x10.8	Em	3-3-3	Em object	800/56		FINE
03	1	02 03W	+34 21	"	6.4	K3III	8-8-8	Late Type	200/160		FINE
3	0	00 51W	+58 08	"	3.6	K1Ib	12-12	"	40/29		FINE
34	1	01 55W	73 14	"	7.1	G8III	8-8-8	"	400/262	south of blue pop	FINE
34	1	0 0 40W	+78 32	"	3.2	K1Ib	12-12	"	40/34		SC. SFR
55	0	03 38W	+8 43	"	9.3	K0p	8-8-8	"	800/260		SC. W K
16	1	02 07W	+37 15	2"	7.1	K3III	8-8-8	"	400/320		SC. W K FINE-
	0		~~+14 46~~	~~2.3"~~	~~5.0~~	~~K3Ib~~	~~8~~	~~"~~	200/~~24~~	Discarded MISSING →	
	1		[illegible]				3/3	not filter			GOOD
		mwp 2/9.0 mm @ 68°F — 22 September 1971									

215

* baked Sept. 7/8

Date Wed/Thur 22/23 Sept. '71 **Observer** Bln-Ri/Le hu Pi **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35241	HD164577	17 56.7	+1 18	G-12	IIa-O*	13/.5		18:54	19:01	A
35242	HD226868	19 54.6	+34 56	"	"	20/.3		19:06	23:00	B
35243	UU Psc	00 09.8	+8 16	"	"	13/.3		23:05	23:40	C
35244	HD2905	00 27.2	+62 23	"	"	9/.7		23:46	00:07	A
35245	δ Cep	22 25.4	+57 54	"	"	13/.5		00:39	01:10	B
35245F1	focus test	and adj/w.i.		G-12	IIa O	9	60°F			C
35245 F1	calibration strip midge for plates 35241 - 35245 (IIaO)								23 Sept	

Dome Temp. 55° H=59%

Focus

Dome Temp. 52° H 82%

Transparency Conditions Very Good – light clouds by 21:30 Heavier Cloud at 23:00

8/6

g Time S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01	4	04 48W	+01 25	3	4.46	A1V	8-8-8	Sp. Bin-Blu	40/18		SL STR
24	5	02 52W	+35° 14'	2-4	9.74	B0Ib	8-8-8	"	800/277	Cyg X-1 (?) Ansm: Please test & calibrate line strength	SL. STR FINE-
40	6	00 45E	+08° 43	2-3	6.15	A9s	8-8-8	"	400/140	Cloud	SL. STR
54	7	00 35E	+62° 51'	1-2	4.30	B1Ia	9-9-9	A9cH *	80/54	"	STRONG
10	8	1h 50W	+53° 16'	1-2	4-5	F5-G2	12-12	G100, Ka	80/48	"	FINE
							3-3 no fill			Broken 2 piece too hazy & cloudy	DISCARDE (EXPOSE BEFORE TEST)
3 Sept		MWD. 2/12 min @ 68°F									

817 *Baked later Sept 7/8/71

Date THURS/FRI 23/24 SEPT '71 **Observer** Dy-Ri-Sl/Bln-R **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35246	R Sct	18 42.1	-05 42.8	G-12	IIa-O*	13/.3		19:38	20:09	A
35247	R CrB	15 44.4	+28 28	"	"	13/.5		20:18	20:51	B
35248	AC Her	18 26.0	+21 47.9	"	"	13/.3	60°F	21:00	23:25	C
35249	HD 192909	20 12.4	+47 24	"	"	9/.5		23:34	23:56	A
35250	HD 201433	21 04.4	+29 48	"	"	13/.5		00:01	00:21	B
35251	HD 213534	22 26.9	+29 02	"	"	13/.5		00:24	01:18	C
35252	HD 220057	23 15.7	+60° 36	"	"	13/.5		01:22	02:17	A
35253	HD 2905	00 27.3	+62 23	"	"	9/.7		02:20	02:28	B
35254	HD 21364	03 21.8	+09 23	"	"	13/.5		02:33	02:37	C
35255	HD 22363	04 23.3	+15 57	"	"	"	52°F	02:40	03:58	A
35256	HD 32519	05 34.1	+31 18	"	"	"		04:01	04:05	B
35257	HD 35407	05 19.4	+2 16	"	"	"		04:28	05:06	C
35258	HD 28052	04 20.7	+15 23	"	"	"		05:08	05:16	A
35259	HD 29139	04 20.7	+16 18	"	"	"	50°F	05:18	05:19	B
35259	focus test	[illegible]	[illegible]	"	"	13	50°F			B

Dome Temp. 520F H 56%

Focus

Dome Temp. +30 H = 74%

Transparency Conditions good lgt wind + bad seeing
wind dropped down after midnight
Scattered clouds at 02:00

2/8

g Time S.T.	Pg	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
09	A	01h 15W	-05 40	3	6.3 - 8.6	G0 - K0	8-8-8	RV Tau	400/175		U.SL.WK
5		04 56W	+28 22	4-5	6.4	F8Ia	8-8-8	RCB.	400/140		U.SL.WK
26		49W	+21 56	5'	7.4 - 9.6	F2 - K4	8-8-8	RV Tau	200/300		SL.WK
26		03 34W	+47 45	4-3'	5.42	K0+A3	8-8-8	Atm. Ecl.	200/160		FINE
21		03 06W	+30 09	3-4	5.6	A0	8-8-8	Sp. Bin - Blu	200/110		SL.STR
11		02 44W	+29° 28	4	6.28	A5	8-8-8	"	200/100	~1" broken off	FINE
7		02 51W	+61 04	4	6.82	B5	8-8-8	"	400/200		SL.STR
21		01 58W	+62 51	4	4.30	B1Ia	8-8-8	McU *	40/25		(WINDY) SL.STR
7		00 56E	+09 42	4	5.66	B8p	12-12	Sp. Bin - Blu	40/18		FINE
58		00 36E	+16° 12'	4	7.12	F8	8-8-8	"	400/260		FINE
25		01 20E	+51 26	4	6.03	B7IV	8-8-8	"	400/290		FINE
36		00 24E	+02° 25	3-4	6.16	F5V	8-8-8	"	400/800		FINE
16		00 45W	+15° 40'	3-4	4.73	F0IV	12-12	"	40/23		FINE
4		00 39W	+16 33	5-4	2.79	K5III	12-12	std. Vel.	40/23		FINE
							3-3	no filter			GOOD
		Ed. 2 WP 2/90 min @ 68°F — 2 v Sept 8/7									

SUNDOWN → 21h R.A.S.C. MEMBERS

*BAKED SEPT. 23/24

319

Date FRI/SAT SEPT. 24/25 1971 **Observer** GZ/RI/SL **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35260	HD 214946	22 36.7	+44 29	G12	IIaoB*	13/0.3	54°F	21 09	22 09	A
35261	HD 216494	22 48.2	−12 09	"	"	13/0.5	"	22:16	23 29	B
35262	HD 219634	23 12.2	+61 25	"	"	13/0.5	"	23:37	00:22	C
35263	HD 225289	23 57.9	+60 45	"	"	13/0.5	"	00:26	00:44	A
35264	HD 3881	00 36.3	+59 23	"	"	13/0.5	53°F	00 49	02:12	B
35265	HD 10260	01 38.3	+60° 32	"	"	13/0.5	"	02 17	02 54	C
35266	HD 11188	01 44.9	+46°55	"	"	13/0.5	"	03 05	04 10	A
35267	HD 11291	01 45.8	+50 18	"	"	13/0.5	50°F	04 13	04:40	B
35268	HD 23324	03 39.2	+24 32	"	"	13/0.5	"	04 50	05:04	C
35269	HD 29365	04 32.4	+20 29	"	"	13/0.5		05:07	05:24	A
35269A	focus test	out out	in in	"	IIaO	13	50°F			B

Dome Temp. 48°F 63%

Focus

Dome Temp. 42°F 64%

Transparency Conditions EXCELLENT AT 22h.

220

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
09		00 35 E	+44 56	~3"	7.12	A2	8-8-8	SPEC. BIN.	400/120		FINE
19	B	00 33 W	-11° 49'	1-2"	5.9	B9V	8-8-8	"	400/200		SL. STR
22		01 05 W	+61 54	"	6.47	B3	8-8-8	"	400/200		STRONG
		00 36 W	+61 14	"	5.9	B7III	8-8-8	"	400/200		STRONG
12		01 29 W	+59° 50	2-4	7.35	A6	8-8-8	"	400/200		SL. STR
7		01 10 W	+60° 58	1-2"	5.58	B7V	8-8-8	"	400/200		SL STR
10		02 17 W	+47 20	"	7.14	B8	8-8-8	"	400/200		SL. STR
49	B	00 45 W	+50 44	"	5.62	B9III	8-8-8	"	400/200		STRONG
09	C	01 18 W	+24 48	"	5.64	B8V	8-8-8	"	400/200		SL. STR
34		00 45 W	+20 14'	"	5.70	B3V	8-8-8		400/200		SL. STR
							3-3	no filter			SL. STRE [illegible]
		NWP-2 / 9.0 min @ 62°F									

221

* baked Sept 23/63
** baked sept 7/8

Date 29/30 Sept. '71 Wed/Thur **Observer** Bln-Tu/Kn-Le-Tu **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35270	HD164577	17 56.7	+1 18	6-12	IIa-O*	13/.5		18:48	19:00	A
35271	HD226767	19 54.6	+31 56	"	"	25/.3	63°F	19:06	22:40	B
35272	HD197809	20 13.4	+42 24	"	"	9/.5		22:43	23:03	C
35273	HD201922	21 09.4	+38 18	"	"	9/.5		23:05	23:29	A
35274	[illegible]	22 59.7	+[illegible]	"	"	13/.3	61°F	23:31	23:55	B
35275	HD 213306	22 25.4	+57°54'	6-12	IIaO*	13/.5		00:30	00:41	C
35276	CH Cep	23 00.0	+62°52'	6-12	IIaO*	13/.3		00:57	02.53	A
35277	NGC 1435	03 45.7 70	+23 59.0 70	"	"	13/.5		03.10	03:12	B
35278	NGC 1976	05 33.8 70	-5 25		IIaO**	"		03:32	03:40	C
35279	HD 14951	02h 19.3	+16°41'	6-12	IIaO	13/.5	57°F	04:00	04:20	A
35280	HD37519	05 34.1	+3 18	"	"	"		04:29	04:49	B
35281	HD35407	05 19.4	+2 16	"	"	"		04:54	05:26	C
35281F1	Focus			"	"	13	56°F			B

Dome Temp. 60° H=65%

Focus

Dome Temp. 50° H=84%

Transparency Conditions Fair - Scattered Cirrus [illegible]

Excellent for 2nd half

222

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 15W	+1 °26'	2-6	4.4	A II	12-12	Sp Bin-Bin	40/220		FINE
23 00W	+35 15	3-4	9.74	B0 I	8-7-8	"	800/300	Cloud	FINE
03 04W	+47 44	3	5.42	K0+A3	8-8-8	Atm. Ext.	200/160		FINE
02 37W	+11 09	2-4	5.6	A	8-8-8	Sp Bin-Bin	200/100	~1½" [illegible]	FINE
00 01E	+8 46	3"	6.15	M2	8-8-8	"	400/140	Broken 2 pcs.	FINE
2h 30 W	58° 18'	3-4	V.B. -5.2	F5-G2	12-12	G100 Km	200/130		FINE
4h 07W	63° 18'	3-4-5	8.04-8.50	B3	8-8-8	"	800/241		FINE
00 17E	24 06	3"		B7	12-12	G100 - Lc	40/16		SL. STR
01 36E	-5 19	3"		O6	12-12	"	40/17	1" broken off - not numbered	FINE
02 15W	10° 36'	3"	5.38	[illegible]	8-8-8	Sp Bin 1½"	200/100		FINE
00 32E	31 26	2"	6.03	F7 V	8-8-8	"	300/180		(GUIDING) FINE
00 20W	+2 26	"	6.16	B5 V	8-8-8	"	200/100	[illegible]	FINE
					[illegible]	[illegible]			GOOD

223

* baked Sept 29/30

Sept 30/Oct 1/71

Date ~~20/21 Sept 21~~ Thurs-Fri **Observer** GH-TD/RH-TL **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35282	IC 4756-1	18 34.6	+15 22	G43	IIaO*	13/3	63°	19:00	19:19	A
35283	IC 4756-7	"	"	"	"	"	62°	19:29	20:59	B
35284	IC 4756-6	"	"	"	"	"	"	21:07	21:51	C
35285	CD 17°291	19h40.2	+16°10	"	"	"	61°	21:59	22:03	A
35286	HDE 236768	19 [illegible]	[illegible]	G-12	"	20/3		22:20	01:00	C
	[illegible]			[illegible]			61°F			B
35287	UU Tau	00 09.7	[illegible]	G-12	IIa-O	13/3		01:05	01:29	A
35288	HD 220057	[illegible]	[illegible]	"	"	13/5		01:44	02:36	B
35289	HD 290[illegible]	[illegible]	[illegible]	"	IIa-O	5/7		02:40	02:50	C
35290	HD 14951	02 19.3	+10 09	"	"	13/5		03:16	03:18	A
35291	HD 21364	03 21.7	+9 23	"	"	"	59°	03:23	03:27	B
35292	HD 28362	04 23.3	+15 57	"	IIa-Ob	13/5	"	03:30	04:28	C
35293	HD 35187	05 17.1	+2 16	"	"	"		04:31	04:59	A
35294	HD 37259	05 34.1	+21 [illegible]	"	"	"	58°	05:01	05:23	B
35294A	Focus			"	IIaO	13	"			A

Dome Temp. 55°F H: 75%

Focus

Dome Temp. 53°F H: 93%

Transparency Conditions Good - Sl haze
Lt. Clouds at end

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible] W	+5° 20′	2"	7.15	F0Ib	3-3-3	GH Cluster	800/120		Sl. wk FINE -
21:2 W	+5° 19′	1	9.43	[illegible]	3-3-3	"	800/120		WEAK
21:26 W	[illegible]° 22′	2"	7.[illegible]	A[illegible]	3-3-3	"	800/120		(WINDING) SL. WK
21:34 W	+10 27	"	5.8	F8	3-3-3	[illegible]	200/32		FINE
5 23 W	+35 12	2-3	7.24	[illegible]	8-8-8	Sp. Bin-Bin	700/250	Anson: Over-lap slightly. Plate at end of box (dw 12 m)	SL. WK
[illegible]	[illegible]				[illegible]	[illegible]			VIOLET [illegible] TO
01 36 W	+8 46	2	6.15	A9s	8-8-8	Sp. Bin-Bin	400/130		FINE
03 38 W	+6:06	1-2	[illegible]	[illegible]	8-8-8	"	400/180		SLIGHTR
0239 W	+6251	"	[illegible]	[illegible]	12-12	McL [illegible]	45/26		STRONG
0116 W	+10 34	"	[illegible]	B6	8-8-8	Sp. Bin-Bin	[illegible]/90	Cloud	FINE
30 22 W	+9 44	"	[illegible]	[illegible]	12-12	"	40/17		(WINDING) FINE
0022 W	+16 14	1-3	[illegible]	F8	8-8-8	"	400/230		FINE
[illegible] E	+[illegible] 34	[illegible]	[illegible]	[illegible]	8-8-8	"	400/180		FINE
[illegible] W	+31 27	1	[illegible]	[illegible]	8-8-8	"	400/180		FINE
					3/3	[illegible]			[illegible]

225

* baked Sept 29/30
** baked Sept 30/Oct 1

Date FRI/SAT OCT 1/2 1971 **Observer** G2-Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35295	HD 214946	22 36.7	+44 29	G12	IIaO *	13/0.5	65°F	18 52	20 16	A
35296	HD 219634	23 12.2	+61 35	"	IIaO **	13/0.5	"	20 22	21 18	B
35297	HD 225093	23 55.3	+72 36	"	"	13/0.3	65°F	21 35	22 41	C
35298	HD 225287	23 57.9	+60 45	"	"	13/0.5	"	22 46	23 06	A
35299	HD 3881	00 36.3	+59 23	"	"	13/0.3	65°F	23 10	23 50	B
35300	HD 10260	01 35.3	+60 32	"	"	9/0.5	"	23 58	00 42	C
35301	HD 11188	01 44.9	+46 58	"	"	13/0.5	64°F	00 47	01 27	A
35302	HD 11291	01 45.8	+50 18	"	"	13/0.5	"	01 30	01 46	B
35303	HD 18473N	02 53.1	+59 17	"	"	13/0.5	"	01 52	02 30	C
35304	HD 23324	03 39.2	+24 32	"	"	13/0.5	"	02 36	02 54	A
35305	HD 23383	03 39.7	+55 37	"	"	13/0.5	63°F	02 59	03 12	B
35306	HD 23837	03 43.1	+44 40	"	"	13/0.5	"	03 18	03 45	C
35307	HD 27742	04 17.7	+20 45	"	"	13/0.5	"	03 53	04 14	A
35308	HD 28475	04 24.2	+10 18	"	"	13/0.5	"	04 21	05 07	B
35309	HD 29365	04 32.4	+20 29	"	"	13/0.5	"	05 13	05 39	C

Dome Temp. 60°F H: 82%

Focus

Dome Temp. 58°F H: 99% — but we were cooled

Transparency Conditions SOME HAZE

Excellent Seeing

22L

ng Time S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1	6	00 00E	+46 55	1"-3"	7.12	A2	8-8-8	SPEC. BIH.	400/200	~ 1/2" MISSING	(GUIDING) U.SL.WK
18	3	01 33E	+61 52	1-2"	6.49	B8	8-8-8	"	400/200		(GUIDING) FINE
41	2	00 57E	+73 05	"	7.52	A3	8-8-8	"	300/275		FINE
46	-	00 35E	+61 13	"	5.9	BTV	8-8-8	"	400/200		FINE
50	2	00 25E	+57 49	"	7.25	A6	8-8-8	"	400/120		FINE
42	2	00 34E	+60 56	~1"	5.58	BTV	8-8-8	"	400/200		FINE
27	-	00 02W	+47 20	"	7.14	B8	8-8-8	"	400/200		FINE
46	1	00 20W	+50 44	<1"	5.63	BTV	8-8-8	"	200/100		FINE
30	2	00 05E	+59 38	"	7.35	A0	8-8-8	"	400/200		FINE
4	1	00 25E	+24 50	"	5.64	BTV	8-8-8	"	200/100	PLEASE CHECK THE	FINE
[illegible]	[illegible]	00 36E	+55 56	1"	6.00	B9	8-8-8	"	400/200	CLOCKS IN THE	FINE
[illegible]	[illegible]	00 25W	+44 55	1-3"	5.79	B5	8-8-8	"	400/250	DOME	FINE
14	2	00 18W	+21 02	"	5.9	BTV	8-8-8	"	400/200		FINE
07	1	01 03W	+10 33	"	6.55	B9	8-8-8	"	400/250		FINE
9	2	01 27W	+20 43	"	5.70	BTV	8-8-8	"	200/100		

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Dr Dengel, Ralph Chou, Ted Clifford

* dated 30/oct/1

Date Mon Tues Oct 4-5/71 **Observer** Hd:Tn 0y **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35310	R Aqt	18 42.1	-5 49	G12	IIaD B	13/.3		18 52	19 24	A
35311	HD 222033	23 32.1	+30 07	"	"	"		19 46	21 06	B
35312	HD 167	00 01.1	+28 00	"	"	"	65°F	21 20	22 12	C
35313	HD 5137	00 48.2	+28 58	"	"	"		22 29	22 37	A
35314	HD 12402	01 56.5	+27 56	"	"	"	61°F	23 46	00 52	E
	~~HD 22257~~	~~03 38.6~~	~~+27 37~~	"	"	"		~~00 55~~		A

Dome Temp. 58°F H=63%

Focus

Dome Temp. 50° H=80%

Transparency Conditions scattered cloud

228

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 14W	-5°38′	2"-3"	6.3-8.5	G0-K0	8-8-8	Dy-vble	400/202		sl wk
01 55E	+30 37′	"	8.02	G0V	8-8-8	SSV	800/300		v. sl wk
01 17E	+28 29	"	7.50	G9III	8-8-8	SSV	800/310		sl. wk
0 45E	+29 25	"	7.49	K0III	8-8-8	SSV	800/305		sl. wk
00 34E	+28 21	"	7.60	K1III	8-8-8	SSV	800/310	Cloud	sl wk
	+27 55	"	7.60	G5V	8-	"	800/	" cancelled	
								Closed 01:30	
dw 6 Oct 171 - mwp 2/9.0 min @ 68°F									
								The dec fast motion is unfortunately more than fast.	
								The red warning light for plate cassette was 90 sec.	

229

* Baked Sept 30/Oct 1

Date Wed-Thurs Oct 6-7/71 Observer Sanyal + J. Thomson / NG # 17 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35315	λ Psc	$23^h\ 38^m.9$	1° 14′	G12	IaO 8*	18/0.3	"	$20^h\ 49^m$	21 01	A
35316	NZel 1967	α 1950 $20^h\ 40^m.1$	δ 1950 +18° 59′	"	"	"	52°	21 11	00:01	C
35317	Stock 2-7	$2^h 3.5$	+59° 33.4	G43	IIaO	13/.3	51°	00:25	00:45	B
35318	Stock 2-43	$2^h 6.6$	+57° 46.4	"	IIaO*	"	49°	00:52	01:59	A
35319	Stock 2-11a	$2^h 4.5$	+59° 33	"	IIaO*	"	46°	02:03	03:34	B
	~~AP 1325-1~~	~~$2^h 9.5$~~	~~+56° 36~~					03:53		C
35319F							Hot			
35319 T1	calibration				IIaO	UNBAKED				
T2					IIaO	BAKED	Oct 6/7			

Dome Temp. 48°F H=70%

Focus 20 R

Dome Temp.

Transparency Conditions very cloudy (windy) 230

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 57E	+9° 40'	~5"	4.5	A5	8/8/8	N Del (std)	200/60		FINE
04:00N	+19° 08'	5-10"	~10	—	8-8-8	N Del / 67	400/240	cloud 21:30, partial clear at 22:30	
04:41E	+59° 55	4-6"	7.0	F5II	3-3-3	GH Cluster	400/70		SL WK
04:27W	+59° 06	3"-4"	8.2	G5II	3-3-3	"	800/119		(SL) WEAK
02:14W	59° 56'	"	9.5	gK2	3-3-3	"	800/140		WEAK
			7.9	(F)	5-			clouds	
	mix/out out				fell in		10/10		ENTIRE TO VIOLET
		FOCUS (10 to 50) CHANGE						Anyone, Please get a calibration plate with plate #s	
								35315 & 35316.	
								A. Sanyal	
								- PLATES SAVED SEPT 30, OCT	
								WERE ALL USED UP.	

231

* baked out 4/7

Date Thurs → Fri 7-8 Oct 1971 **Observer** [illegible] **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35320	BS 8775	22 58.9	+27 32 ~~+24 32~~	G12	IIN(sens)	13/5	49°F	22:49	——	A
35321	"	"	"	"	"	"	"	23:00	23:02	B
35322	"	"	"	"	"	"	"	23:32	——	C
35323	BS 168	00 34.8	55 59	"	"	"	"	23:48	23 53	A
35324	UU Psc	00 09.8	+ 8 16	"	IIa-O*	13/5		00:14	00:32	B
35325	HD 13514	22 26.9	+ 37 02	"	"	13/5		[illegible]	[illegible]	[illegible]
[illegible]	UU Psc	[illegible]	+ 8 16	"	"	13/5		[illegible]	01:30	A
[illegible]	[illegible]	[illegible]	[illegible]	"	"	13/5	45°F	01:34	02:20	C
[illegible]	[illegible]	00 09.8	+ 8 16	"	"	13/5		02:22	[illegible]	B
35329	HD 14951	02 19.3	+ 10 09	"	"	13/5		02:44	02:58	A
[illegible]	2 Tau	03 21.8	+ 9 23	"	"	"		03:02	[illegible]	B
35331	[illegible]	[illegible]	[illegible]	"	"	"	43°F	03:08	04:00	C
[illegible]	[illegible]	[illegible]	[illegible]	"	"	13/5		[illegible]	05:13	B
35333	[illegible]	[illegible]	+ 51 [illegible]	"	"	13/5	42°F	05:14	[illegible]	A
[illegible]	[illegible]			"	"	13	"			B

Dome Temp. 45°F / 729.14

Focus 50R

Dome Temp. 54

Transparency Conditions [illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 34W	28° 03′	2-3	2 42 J=-0.11	K2	90-180	A410	40/6	exp 1° } Demulsified.	to weak
50 47W	"	"	"	"	270	"	40/12		weak.
01 18W	"	"	"	"	270	"	40/4	exp 30° } Anson - Left in freezer - 4m 2-19 @ 61°R	VERY WEAK
00 00	+56 29	"	J=0.84	K0	90-180	"	40/80	5min	fine
01 06W	[illegible]	[illegible]	[illegible]	A5	8-8-8	Sp. Bin - Bin	400/125		FINE
[illegible]	[illegible]	2-3	[illegible]	A5	[illegible]	"	400/140		FINE
02 04W	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	"	400/125		FINE
04 03W	+24 37	[illegible]	[illegible]	A0	8-8-8	"	400/120		FINE
[illegible]	[illegible]	2-4	[illegible]	[illegible]	[illegible]	"	[illegible]		FINE
01 24W	+10 36	2-3	[illegible]	G6	8-8-8	"	[illegible]/90		SL. STR
[illegible]	+ 9 43	"	3.66	B8p	12-12	"	40/12		SL. STR
[illegible]	[illegible]	3-4	7.12	F2	[illegible]	"	[illegible]		FINE
00 02W	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]/300		FINE
[illegible]	+31 24	"	6.03	K7V	[illegible]	[illegible]	[illegible]		V. SL STR.
									VERY SLIGHT CENTER TO VIOLET

233

* boked Oct 6/7

Date Sun-Mon Oct 10-11 1971 **Observer** A. Sanyal + Tn/G1-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35334	λ Psc	23 36.9	+1 14	G43	IIaO	131.5		20:34	20:42	A
35335	"	"	"	"	"	181.3	55°F	20:53	21:01	B
35336	HD 5394	00 50.7	+60 11	G12	IIaO	91.5	53°F	00:13	00:15	A
35337	HD 10516	01h 37m.3	+50° 11'	"	"	"		00:19	00:25	
35338	HD 20336	03h 11m.2	+65° 17'	"	"	"		00:30	00:42	C
35339	HD 26571	24h 07m.0	+00°09	"	"	"		00:48	00:00	A
35339F1	Focus			"	"	9	51°F			B

Dome Temp. 48°F H=74%

Focus 50 R

Dome Temp. 43°F H=82%

Transparency Conditions Clear by 20:30
Cloud by 21h

234

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
200E	+1 40	1"-2"	4.5	A5	3/6	Nova Del std	200/60	(SC	STRONG FINE –
1 41E	"	"	"	"	6-6	"	200/60		STRONG
0 19W	+60 39	3"-4"	2.65	B0	12-12	Be-31	40/16		SL. STR
0 16E	+50 36	2"-3"	4.03	B1	12-12	"	40/19		FINE
0 36E	65 36	"	4.78	B2	8-8-8	"	40/19		FINE
0 12E	22 25	"	6.11	B8	8-8-8	Gl Ap+m	400/173	Cloud again	(GUIDING) FINE
	[illegible]				3/3	no filter			GOOD
								got drips on mirror? (everything seemed dry enough?)	

235

* Lated Oct 8/7

Date Morning Oct 11/12 1971 **Observer** Dy-Tu-Hd **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35340	R Sct	18 42.1	-5 49	G12	IIaD*	131.3		18:29	18:59	A
35341	HD 222033	23 32.1	+30 07	"	"	"		19 05	20:39	B
35342	HD 8747	01 21.2	+26 43	G12	IaD*	131.3	47°F	00 40	02 02	A
35343	CO Aur	05 53.8	+35 19	"	"	181.3		02 24	04:12	C
35344	HD 71093	08 20.4	+28 14	"	"	131.3		04 25	05 19	B
35345	Focus					12	43°F			E

Dome Temp. 46°F H: 64%

Focus 50 R

Dome Temp. 39°F H=85%

Transparency Conditions Very good - some cloud 036

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 15 W	-5 40	2".3	6.3-8.6	G0-K0	8-8-8	RV Tau	800/400		FINE
1 55 E	+30 34	2".4	8.02	G0 V	8-8-8	S SV	800/300		FINE
								cloud 21h bounded	
21 46 W	+27 13	2".4	8.07	K0 III	8-3-8	S SV	800/300		FINE
00 44 E	+35 25	"	7.8-2.6	F5	8-8-8	RV Tau	800/300	(NOTE SLIT!)	FINE
2 02 E	+28 06	2".4	7.40	K5 III	8-8-8	SSV	800/364		FINE
					3/3	[illegible]			GOOD

237

* baked Oct 7/8

Date Tues-Wed Oct 12/13/71 **Observer** Bln-Tn/ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35345	HD 226868	19 54.6	+34° 56′	G12	IIIa O*	20/3		20:08	21:35	A

Dome Temp. 42 H=77%

Focus 50-R

Dome Temp. 40° H=73%

Transparency Conditions very good - then cloud

238

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02:45W	35° 14′	1"-2"	9.74	BO Ib	8-16	Sp Rn-Bln	800/f 3	cloud 20:30 Overdevelop Maximum useful time	WEAK
MWP. 2/15 min @ 68°F						13 Oct 8/71			

239

* baked Oct. 6/7/71

Date Thurs-Fri Oct. 14/15/71 **Observer** Sh.-S **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35346	R. Sct	18 42.08	-05° 48	G-12	IIa-O*	13/0.7	50°F	20:18	20:50	A
35347	40252214	06h 06.2	+13° 59	"	"	13/0.7		01:16	01:16	B
35347F1						13	48°F			C

Dome Temp. 50°F H=94%

Transparency Conditions Fair

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03h 18m	-05° 39'	4-5"	6.3 8.6	60- <0	8-8	Dy	400/40,	closed → star low humidity high	VERY WEAK
closed up due to high humidity.									
—	+14° 04'	3-	8.13	60	8-8-8	Six	500/83	no trail wh pr	VERY WEAK
					3-3	no filter.			GOOD
dew point min @ 68°F in mcur. 2 - 15 Oct 1971									

24

* Ammonia Sensitized Oct. 6/71 ** baked Oct 13

Date Fri - Sat Oct 15/16/71 **Observer** Cu - Cf - 51 / mcU-51 **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35348	α Ly. (Vega)	18 33.6	[illegible] 41	G 12	I-N*	13/5		20:30	20:32	A
35349	BS 8775	23 01.8	+77° 52'	"	"	"	60°F	20:47	20:51	B
35350	BS 8237	21 [illegible]	-05° 45	"	"	"		21:08	21:35	C
35351	BS 8079	21 03.5	+43 46	"	"	"	"	21:51	22:13	A
35352	BS 21	00 03.1	+58 36	"	"	"	"	22:34	22:43	B
35353	BS 337	01 04.1	+35 05	"	"	"	"	23:10	23 16	C
35354	HD 5137	00 48.2	+28 58	"	IIaO b**	13/0.3		23 35	00 53	A
35355	HD 2905	00 27.3	+62 23	"	IIaO	13/0.7		01:05	01:10	C
35356	HD 8747	01 21.2	+26 43	"	IIaOb	13/0.3		02 27	03 41	E
35357	HD 23257	03 38.6	+27 37	"	"	"		03 46	05 45	C
35358	Focus					13				

Dome Temp. 53°F H = 94%

Focus

Dome Temp. 50°F H = 94%

Transparency Conditions Cirrus & haze

SECOND HALF — HEAVY HAZE & INTERMITTENT CIRRUS. VERY [illegible] — [illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03h 10W	+38° 50'	3-4	I = 0.07	A0 V	4.5 min	A 410	20/60	→ Counter # not sig no.	
57E	[illegible]	"	I = -0.41	M2 III	4.5 min	"	40/32		
1h 24W	-05° 37'	2-3	I = 1.83	G0Ib	1.5 min 1.5 min 1.5 min	"	40/138	taken for 25 min to calib of [illegible]	
2h 25W	+45° 55'	"	I = 1.59	K5Ib	2/2/2.5	"	40/90	for 20 min	
0h 05E	59 05	"	I = 1.76	F2 IV	2/4	"	40/120		
0h 37E	35 31	"	I = -1.10	M0 III	3/3	"	20/50		0. sc. wk
01 35W	[illegible] 25	"	7.49	K0 III	3-8-	SSV	800/350	capped at 00 18 — 1 lost 2 recapped at 00 24	sc. wk
01h 57W	+62° 52'	"	4.3	B1Ia	11-12	mcu *	40/24		sc str
03 33W	+27 11	2-3	8.07	K0 III	4-4-7 4-4-4	SSV	500/200	LEFT DARK SLIDE IN! (FAINT)	WEAK
03h 22W	27 55	"	7.6	G5 I	4-4-4 4-4-	"	500/252	SKY VERY HAZE — [illegible] CIRRUS	sc. wk
					3/3	no fi Hor.			BLANK

243

* baked Oct. 13/71

Date Sat-Sun Oct. 16/17/71 **Observer** E/N 51 **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35358	HD 226868	19 54.6	+34° 56'	G-12	IIa-O*	25/3		21h 32	23:00	A
35359	HD 24399	03h 47.9	+31° 35'	"	"	9/5		23h 11	23h 42	B

Dome Temp. 52°F H 83%

Focus

Dome Temp.

Transparency Conditions Moderately thick haze

244

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01h 26W	+35° 12	3-4	9.74	BOI D	7-14	Sp Bin-Bin	800/52	Anson! Develop like 3530 s- Placed at end of box	VERY WEAK
22h 46E	+31° 50	2-3	2.96	BIIb	12-12	"	40/9	very thick haze	sl. wk

245

* baked Oct. 13/71

Date Mon-Tue Oct 18/19/71 **Observer** H.d-S/[illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35360	RS Cd.	18h 47.08	-05° 48.8	G-12	IIa-O*	13/.5		19 14	19 14	A
~~35361~~	~~HD 213087~~	~~23 49.4~~	~~+76 16~~	~~"~~	~~"~~	~~13/.3~~	~~—~~	~~19 26~~		~~B~~
35361	HD 187691	19 46.2	+10 10	G-12	IIaO/B	13/.3		20 00	20:31	C
35362	HD 4550	0 42.4	+25 44	"	"	"	56°F	20 40	21:55	A
35363	HD 8747	1 21.2	+26 43	"	"	"	54°	22 06	23 03	B
35364	HD 14638	1 58.7	+25 57	"	"	"		23 14	00 17	C
35365	HD 21483	[illegible]	[illegible]		"	9/.5		00:42	00:56	A
35366	HD 215396	23 02.4	+58 53	"	"	"		01:02	01:12	B
35367	(111) Psc	00 09.50	+08 16	"	"	13/.3		01:19	01:40	C
35368	HD 13851	02h 07.9	+56° 35	"	"	13/.5	53°F	01:50	02:22	A
35369	HD 24398	03h 47.9	+31 35	"	"	9/.5		02:32	02:35	B
35370	HD 14951	02h 19.3	+10° 09	"	"	13/.5		02:41	02:57	C
35371	2 Tau	03h 21.05	+09 23	"	"	"		03:00	03:03	A
35372	HD [illegible]	04 23.3	+15 57	"	"	"		03:07	03:15	B
35373	CO Aur	05 53.5	35° 19	"	"	13/.3	52°F	04:18	05:30	C
35374	HD [illegible]	05 31.1	-1° 12'	"	"	9/.5		05:33	05:36	A

Dome Temp. 51°F H= 90%

Transparency Conditions Hazy w/ Sol. Fog [illegible]

Focus

Dome Temp.

J46

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
W 1h37	-05° 37'	2-3	6.3-8	G0-K0	8-8-8	Dy vels	800/400	[illegible]	WEAK
Impossible to see		"	5.2	G8	8	Std Vel	800/	Double star [illegible] field	
W 2h12	+10 28	2	5.5	F8	8-8-8	Std Vel	200/75		FINE
E 1h21	+26 14	"	8.16	K0 III	8-8-8	SSV (II)	800/200		
E 0h44	+27° 12	2	5.07	K0 III	5.8-8	SSV (I)	800/200	[illegible]	SL. WK
00 07W	+35 [illegible]	"	5.26	G-8 III	8-8-8	SSV (II)	800/200	Field checks.	SL. WK
03 46 W / 03 21W	+40° 08	2-3	5.15	[illegible] III	9-9-9	Sp. std.	20/36		SL. STR
03h3[illegible]	+59° 21	"	4.93	[illegible] III	9-9-9	"	80/36		SL. STR
0[illegible]5 W	+09° 45	"	6.15	A9 S	8-8-8	Sp. Pur-Blu	400/130		FINE
01 44W	+57 00	1-2	6.77	B1 Ib	8-8-8	Sp. Std	400/200		SL. STR
00 14W	+31 50	"	2.96	B1 Ib	12-12	"	40/20		VERY STRONG
02h 03W	+0° 33	?	5.38	B6	8-8-8	Sp. Bu. Blu	20/34		V. SL. STR
01h 08W	+09 44	"	3.66	B8 p	8-8-8	"	40/16		V. SL. STR
0 12 W	+11° 10	2-3	7.12	[illegible]	8-8-8	"	400/270		(GUIDING) FINE
0 [illegible] W	+35 25	"	7.2	F5	8-8-8	Rv Tau - Dy	400/300		FINE
01h 32W	-01° 10	"	1.57	B0 Ia	12-12	Sp. Std.	20/8		(GUIDING) SL. STR

247

Date [illegible] Observer [illegible] Julian Day [illegible]

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
[illegible]	HD 38771	05 40.0	[illegible]	[illegible]	IIa-O	9/.5		05:40	05:42.	R
[illegible]	HD [illegible]	05 33.7	[illegible]	"	"	9/.5		05:46	05:49	C
[illegible]	Tous					9				

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

248

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01h27w	-09°36	2-3	1.x6	Posta	12-12	5 p. 5-1	20/8		SC. STP
01h40w	-09°30	"	2.05	[illegible]	12-12	"	20/8		SC. STP
					3/3	NU [illegible]			GOOD

249 Waterloo night / Astronomy 100 (Fernie)
*baked Oct. 19/71

Date Tue/Wed Oct 19/20/71 **Observer** BK-S1 / HW -S1 **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35377	HD 198134	20 43.2	+34 00	G-12	IIa-O *	13/.5		18:35	19 10	A
35378	MHd -378116	19 55.0	+39 41	G-12	"	13/.3		20:22	00:03	B
35379	HD-216916	22 51.9	+41 04	"	"	13/.5	56°F	00:12	00:25	C
35380	HD 13994	2 11.0	57 04	"	"	13/.5		01:06	01:28	B
35381	HD-16028	2 29.4	+36 53	"	"	"		01:34	02:11	C
35382	HD-31487	4 51.3	+51 47	"	"	13/.3		02:25	05:25	A
35382	HD-37115	7 21.7	+8 20	"	"	13/.5	54°F	05:41	05:4[illegible]	D
35382F	FOCUS					13				

Dome Temp. 49°F H=74%

Focus

Dome Temp. 46°F H 89%

Transparency Conditions Excellent

250

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
10	A	0 02E	+34°18	2-3	6.4	K3 III	8-8-8	Waterloo	800/600		*
1.3	B	05h 40W	+39 50	2-3	10.8	E n	8-8-8	"	800/60	Anson - plate was broken → gs at end of plate bar	*
4	C	3h 4W	+41 33	"	5.5	B 2 III	8-8-8	"	200/100	in two pieces	*
28	B	6h 55W	+57°29	"	7.0	G2 III	8-8-8	"	200/100	trouble with dec clamp	*
	C	01h 11W	+37°16	1-2	7.1	K3 III	8-8-8	"	200/120		*
15	D	02h 07W	+51°56	1-2	9.0	K0p	8-8-8	"	800/300		*
		00 06E	+08 26	2-3	2.7/	A7 V	8-8-8	Sp, Bn B/W	40/20		*
							3/3	no filter.			NO CENTRE IES
										* NO COMPARISON.	

251

* baked Oct 19/71
** baked Oct 12/0 71

Date Wed Thurs Oct 20/21 1971 **Observer** [illegible] **Julian Day** [illegible]

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35384	HD 226868	19 54.6	+34 56	G12	IIaO *	20/3	57°F	18:43	21:55	B
35385	HD 192909	20 12.4	+41 29	"	"	9/5		22:03	22:19	C
35386	HD 190919	20 02.2	+35 29	"	"	13/3		22:28	23:19	A
35387	HD [illegible]	20 02.1	+61 [illegible]	"	"	[illegible]		23:28	[illegible]	B
35388	HD [illegible]	[illegible] 37.0	[illegible]	"		"		23:44	23:56	C
35389	2 Tau	03 21.8	+19 23	"	"	"	56°F	00:01	00:05	A
35390	Stock 2-11	02 14	[illegible]	G43	IIaO *	[illegible]	55°F	00:31	[illegible]	A
35391	Stock 2-7	02 3.5	+59 23	"	IIaO +	"	"	02:14	[illegible]	B
35392	Stock 2-55	02 7	+58 17.1	"	"	"	"	≈02:45	04:13	C
35393	Stock 2-14	02 17.5	+55 54	"	"	"		[illegible]	05:01	A
35394	HD 138584	02 8.5	+56° [illegible]	"	"	"		05:4	05:32	B
35395	[illegible]			"	IIaO	B				B

Dome Temp. 52°F H=80% Transparency Conditions Very good but haze

Focus

Dome Temp. 75 fog so dense

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]	+35 13	1"-2"	9.74	B0 Ib	8-7-7	Sp. Bin. - Ha.	800/300		FINE
[illegible]	+47 44	1-2	5.72	K5 III	8-8-8	Atm. Ecl.	200/160		V.SL. WK
0452W	+35 40	2"	7.55	[illegible]	8-8-8	[illegible]	800/275		(GUIDING) FINE
0319W	+62 15	1-2	5.19	[illegible]	8-8-8	"	30/34		FINE
0254W	+40 09	"	5.10	[illegible]	8-8-8	"	80/36		FINE
0142E	+9 43	1"	3.74	B8p	12-12	"	40/16		(GUIDING) FINE
0129W	+54 56	1-2"	9.51	[illegible]	3-3-3	Gal. Cl.	800/160	broken 1½" [illegible]	SL. WK
[illegible]	+54 56	"	[illegible]	[illegible]	3-3-3	"	[illegible]/58		V.SL. WK
340W	+58 41	2"	[illegible]	[illegible]	3-3-3	"	[illegible]		WEAK
[illegible]	[illegible] 58	"	[illegible]	[illegible]	3-3-3	"	[illegible]/120		VERY WEAK
235W	+54 02	"	[illegible]	[illegible]	3-3-3	"	[illegible]/30	IS THERE ANOTHER UNEXPOSED BOX SOMEWHERE?	WEAK
					[illegible]	[illegible]			GOOD
								Anson - Plates??	
		- PLATES STARTED BAKING AT 10:00 AM;						I put a box in Lower Tray for you.	
		- REMOVE & USE BOX FROM BAKING OVEN IF YOU NEED THEM							MANY THANKS

253

Date Wed/Thur Oct 27/28 '71 **Observer** Blu-Tu-Ka-T. **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35395	HD191610	20 05.7	+36 33	6-K	IIa-O	13/5		17:57	18:07	A
35396	HDE226868	19 [illegible]	+21 56	"	"	25/3	57°F	19:10	23:10	B
35397	HD [illegible]	20 12.4	+47 26	"	"	9/5	"	22:13	23:01	C
35398	LBW Peg 1	00 09.8	+8 16	"	"	13/2	"	23:10	23:50	A
35399	HD13554	02 9.5	+5[illegible]	G43	"	"	"	00:06	00:26	C
35400	Stock 2-160	02 12.5	+59°34	"	"	"	"	00:58	02:02	C
35401	Stock 2-10	02 6.1	+59°31	"	"	"	55°F	02:14	03:44	A
35402	HD44131	06 15.0	-02 51	"	"	"	"	03:50	04:02	C
35403	NGC 2169-3	06 02.8	+12°58	"	"	"	"	04:05	05:55	A
35403F	Focus			"	IIaO	13	55°F			B
35403 71	Calibration [illegible] for plates 35391, 35397 - 35403									
72				plate # 35396						

Dome Temp. 52° H=95% [illegible]

Focus

Dome Temp. 52° H=95% was wet but not now.

Transparency Conditions [illegible] + uncertain c fog

254

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 03W	+36 51	3	4.2	[illegible]	2-[illegible]	Sp. Bin-Bln	40/16*		FINE
04 ~~24~~ 16W	+35 14	3-5	9-4	[illegible]	8-8-7	"	100/[illegible]*	[illegible]	V.SL.WK
[illegible]	+47 42	[illegible]	[illegible]	[illegible]	8-7-8	A+[illegible]	[illegible]		SL.WK
01 42W	[illegible]	[illegible]	[illegible]	[illegible]	7-8-8	Sp. Bin Bln	400/130*		FINE
00 17W	+56 59	3"	6.2	Big	3-3-3	std vel	200/25*	High [illegible]	SL.STR
[illegible]	+59 56	[illegible]	8.2	[illegible]	3-3-3	[illegible]	[illegible]/120*		FINE
03 38W	+59 52	2"	[illegible]	[illegible]	3-3-3	"	[illegible]/130*		FINE
00 10E	-2 ?49	2"-3"	6.5 ~~[illegible]~~	HI ~~[illegible]~~	3-3-3	std vel	200/40		V.SL.WK
[illegible]	+14 07	2"	9.4	[illegible]	3-3-3	[illegible]	[illegible]/47		WEAK
	[illegible]	[illegible]	[illegible]		10/10	Filter			GOOD

255

* Sensitized Oct. 27/71 (A100 Extension 7120 →)
** baked

Date Thurs-Fri Oct 28/29/71 Observer Cf, Cu / Tn, Sl / Sl-Tn-Cb Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35404	357926	20 38	44°55'	G-12	I-N*	13/.5	64	18:14	18:20	A
35405	BS 7622	22 34.2	38 32	"	"	"	"	18:26	19:18	B
35406	BS 8430	22 02.3	24 57	"	"	"	"	20:16	20:40	C
35407	BS 8751	22 59.8	14 40	"	"	"	"	20:54	21:12	B
35408	BS 0039	00 08.1	14 38	"	"	"		21:31	22:15	A
35409	BS 219	00 43.1	57 17	"	"	"		22:26	22:58	C
35410	BS 403	01 19.3	+59 43	"	"	"	"	23:06	23:30	A
35411	BS 921	02 58.8	38 27	"	"	"	"	23:43	2[illegible]:16	B
35412	HD 6675	01 02.1	+69 10	"	IIaO**	13/.3	"	00:08	00:52	A
35413	2 Tau	03 21.8	+9 23	"	"	13/.5		01:03	01:09	B
35414	28363	04 23.3	+15 57	"	"	9/.3	56°F	01:21	02:45	C
35415	CD Aur	05 53.8	+35 19	"	"	13/.3	"	02:50	05:06	B
35416	HD 28446	04 24.1	+53 42	"	"	13/.5	"	05:18	05:42	C
35417	β Gem	07 37.2	+28 16	"	"	"	"	05:45	05:47	A
17F	Focus Test			"	IIaO	13	54			B

Dome Temp. 52°F H=76%

Focus

Dome Temp. 47°F H=84%

* Transparency Conditions Excellent.

Anson - plates 35412 - 417 are on right side of unexp baked plate box.

Hour Angle End	Declination	Seeing	Prg Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	(v-1)	Quality
00h 15E	45° 17	2	1.03 I	A2Ia	1.5/3.0 min.	A 410 Y	20/60	6 min	+.22	[illegible]
01 10E	38° 59	"	I 5.17	O9V	1.5/1.5/1.5	"	200/874	52 min exposure	-.29	[illegible]
00 40W	25° 18.	"	II 3.12	F5V	1.5/1.5/1.5	"	40/109.	20 min exp	+.54	WEAK
00 28W	15° 10	"	I 2.48	B9III	1.5/1.5/1.5	"	40/391	25 min exp	-0.01	SL. WK
00 12W	15° 08	"	I 3.52	B2III	1.5/1.5/1.5	"	40/680	45 min	-.31	(GUIDING) SL. WK
00 19W	57 45	"	I 2.57	G0V	1.5/1.5/1.5	"	40/270	30 min	-0.06	FINE
00 16W	60 10	"	II 2.45	A5V	1.5/1.5/1.5	"	40/470	22 min.	+0.24	FINE
01 05E	32 46	"	I 0.00	M4IIIa	2/2	"	40/10	3 min	+3.39	SL. WK
01 54W	69 34	"	II 7.95	[illegible]	8-8-8	Sp. Std.	800/280	[illegible]		SL. STR
00 07E	———	"	3.66	[illegible]	8-8-8	Spec. Cln	40/19	"		STRONG
00 28W	+16 11	"	7.12	F8	8-8-8	"	800/350			FINE
01 12W	13 5 26	2-3	7.8-9.6	F5	8-8-8	R Vir Tau	800/300	faint		FINE
03 22W	+53° 57	"	5.22	K0III	8-8-8	Sp. Std.	200/100	visual binary?? [illegible]		STRONG
00 13W	+28° 10	"	2.15	K0III	12-12	std vel	40/28			STRONG
	[illegible]				3/2	[illegible]				GOOD

257

* baked Oct 21/22

Date Fri/Sat Oct 29/30 1971 **Observer** Ble Tu SI/McU **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35418	HD191610	20 05.7	+36 33	6-12	IIa-O*	13/.5	58°F	17:51	17:57	A
35419	HDE226868	19 54.6	+34 56	"	"	20/.3		18:02	22:00	B
35420	HD192909	20 12.4	+42 24	"	"	9/.5		22:03	22:15	C
35421	UU Peg	00 09.8	+2 16	"	"	13/.3		23:19	23:43	A
35422	HD21364	03 21.8	+9 23	"	"	13/.5		23:49	23:53	C
35423	HD24398	03 47.9	+31 35	"	"	9/.5	54°F	23:56	00:00	A
35424	HD14951	02 19.3	+10 28	"	"	9/.5		00:57	01:15	B
35425	HD 21364	03 21.8	+9 23	"	"	"	54°F	01:19	01:34	C
35426	HD 24912	03 52.5	+35 30	"	"	13/.5		01:41	01:57	A
35426F	FOCUS.			"	"	B	53°F			B

Dome Temp. 50° H=72%

Focus

Dome Temp. 47° H=87%

Transparency Conditions Scattered Clouds - Fair - Good

258

g Time S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
57		00 00	+36 54	2	4.82	B5Ia	8-8-8	Sp. Bin. Bin	40/16		SC. STR
00		04 16W	+35° 12	2	9.74	B0Ib	11-6-8	"	800/220	Broken 2pcs Cloud 22:30 Anson: Overdevelop Mense	* BAD FOCUS
15		[illegible]	+47 44	"	5.42	K0 + A3	8-8-8	Atm. Ecl.	200/221	cloud 22:30	FINE
42		01 43W	+8 44	1"-2"	[illegible]	A3	8-7-8	Sp. [illegible]	400/140		FINE
02		01 19E [illegible]	+9 44	2	3.66	[illegible]	12-12	"	40/17		SC. STR
		01 39E [illegible]	+32 57	1"-2"	2.96	A5Ib	12-12	Sp. Std.	40/22		SC. STR
5		01 05W	+10 35	2-3"	5.38	B6	8-8-8	Sp. B. - [illegible]	200/100		FINE
34		00 22W	+09 44	"	3.66	B8p	12-12	"	40/20		FINE
57		[illegible]	+35 50	3-4	4.04	O7	8-8-8	"	20/90		SC. STR
	18						3/3	no filter	2[illegible]		GOOD

*At right hand end of box

259

* baked Oct. 27/71

Date Sat/Sun Oct 30/31/71 **Observer** Dy-TN-SI/GI **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35427	D Sct	18 42.08	-05° 49	G-12	IIa-O*	13/.2		17:58	18:30	A
35428	AC Her.	18 26.02	+21 48	"	"	"	60°F	18:34	20:34	B
35429	HD 4550	00 42.4	+25 44	"	"	"	60°F	20:42	22:12	C
35430	HD 8747	01 21.2	+26 43	"	"	"		22:15	23:27	A
35431	HD 5394	00 50.7	+60 11	"	"	9/.5	56°F	23:35	23:36	B
35432	HD 10516	01h 37.5m	+50° 11'	"	"	"		23:39	23:45	C
35433	HD 20336	03 11.2	+65 17	"	"	"		23:47	00:01	A
35434	HD 23862	03h 43.3	+23° 51	"	"	"	56°F	00:00	00:30	B
35435	HD 26571	04h 07.0m	+20° 05'	"	"	"		00:32	01:48	C
35436	HD 35439	05 19.5	+1 45	"	"	"	53°F	01:55	02:25	A
35437	HD 37202	05 31.7	+21 05	"	"	"		02:31	02:35	B
35438	HD 51418	06h 50.8	+42° 26'	"	"	"		02:40	04:20	C

Dome Temp. 51°F H=79 %

Focus

Dome Temp. 43°F H=20%

Transparency Conditions Good - Some thin cirrus. Gibbous Moon

260

ng Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
29		0 20 00W	+05 38	2-3	6.3 -8.6	G5-K1	8-8-8	Var.-Dy	400/200		SC. WK
.34		04 22W	+21 59	"	7.4 9.6	F2-K4	8-8-8	"	400/190		FINE
12		00 16 E	+26 15	1-2	8.16	K0 III	8-8-8	SSV(II)	800/350	* Anson - plate broken 2 pieces.	V.SC. WK
27		00 19W	+27 13	"	8.07	K0 III	8-8-8	"	800/350		FINE
1		[illegible]	+60 39	"	2.65	B0	8-16	G1-Re	40/17		(GUIDING) FINE
15		00 20W	+50 37	"	4.03	B1	12-12	"	40/16		(GUIDING) FINE
01		01 00E	+65° 40	3	4.78	B2	12-12	"	40/19		FINE
37		01 00E	+24 08	5"	5.13	B8	8-8-8	"	200/90		FINE
42		00 05E	+22 26	2-5"	6.11	K1	8-8-8	G1 form	400/220		FINE
15		00 40E	+1 56	4"-10	4.94	B1	12-12	G1-Be	200/90		FINE
35		00 42E	+21 14	2"-3"	2.99	B2	12-12	"	40/17		V.SC. STR
20		00 15 E	+42 27	"	6.61	A0p	8-8-8	G1 form	400/140	cloud 9:15	

261 SUN-MON. * baked Oct 27/71

Date Oct. 31/71 - NOV. 1/71 Observer SHT-TN Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
35439	HD 12216	$1^h 54.9^m$	$+71°56^m$	G12	IIaO*	13/.5		20:56	21:00	A
35440	HD14951	$2^h 19.3^m$	$+10°09^m$	"	"	"	56F	21:07	21:31	C
35441	HD 12402	1 56.5	+27 56	"	"	13/.3	"	21:34	22:44	A
35442	HDR52214	$6^h 02.7^m$	$+13°59$	"	"	13/.3		22:54	00:36	B
35443	HDR52214	"	"	"	"	"		00:34	01:50	C
35444	HD252214	"	"	"	"	"	54°F	01:52	02:58	A
35445	HD252214	"	"	"	"	"		03:00	04:02	B
35446	"	"	"	"	"	"	50°F	04:04	05:06	C
35447	"	"	"	"	"	"		05:09	06:07	A
35447	F1 Focus			"	IIaO	13	47°F			B
35447 71	for plate # 35419									
71		418, 420 - 447								

Dome Temp. 50°F H 60%

Focus

Dome Temp. 40°F H 78%

Transparency Conditions Scat Cloud but good

Very wet in dome at dusk

Argon-Explosion strong enough to blow [illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2:40E	72 21	2½-3"	4.08	A1 V	10-14	Sp Ba-Ha	40/16		FINE
2:31E	10° 35	3-4"	5.38	B6	8-8-8	"	200/95		(GUIDING) FINE
0:55E	28 21	2½-3"	7.60	K1 III	8-8-8	SSV	800/350		U.SL.WK
3:15E	14 04	3-5	8.3	B0	8-8-8	G1001	800/147		SL.WK
01 54E	14 04	2-3	"	"	8-8-8	"	800/150		FINE
0046E	14 04	3½-5"	"	"	8-8-8	"	800/150		FINE
00:8W	14 04	"	"	"	8-8-8	"	800/150		FINE
0120W	1404	3-4½"	"	"	8-8-8	"	800/120		FINE
02:25W	1404	"	"	"	8-8-8	"	800/102		FINE
					3/3	[illegible]			GOOD
2.00	21.5 min @ 62°F								

#1

263

* baked Oct 27/71
* baked Oct 21/22/71

Date Nov 1/2 / 71 Mon Tues **Observer** [illegible] / **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35448	HD 206778	21 39.3	+9 25	612	IIa-O*	13/15	50°F	17:58	18 00	A
35449	12 Lac	22 37.0	+ 39 43	"	"	13/15	"	18:08	18:16	B
35450	"	"	"	"	"	"	"	18:18	[illegible]	C
35451	"	"	"	"	IIa-O*	"	"	18 29	18 35	A
35452	"	"	"	"	" *	"	"	18:37	18:43	B
35453	"	"	"	"	" *	"	"	18 45	[illegible]	C
35454	"	"	"	"	"	"		18 53	19:01½	A
35455	"	"	"	"	"	"	"	19 04	19 10½	B
35456	"	"	"	"	"	"	"	19 12	19 21	C
35457	"	"	"	"	"	"		19 23½	19 32	A
35458	"	"	"	"	"	"	"	19 33	19 42	B
35459	"	"	"	"	"	"	"	19 43	19 57	C
35460	"	"	"	"	"	"		19 59	20 17	B
35461	"	"	"	"	"	"	"	20 18	20 28	C
35462	"	"	"	"	"	"	"	20 29	20:40	B

Dome Temp. 43°F H=66%

Focus

Dome Temp.

Transparency Conditions Cloudy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04 17 E	+9 50	2"	3.98	K2V	12-12	std vel	40/29	Too cloudy	
22 00 E	+40 10	"	5.1	B2III	8-8-8	std *	200/90	" " "	
01 50 E	"	"	"	"	8-8-8	"	200/70	Too cloudy	
01 40 E	"	1-2"	"	"	8-8-8	"	200/70	Cloud breaks	SC. STR
1 32 E	"	"	"	"	8-8-8	"	200/70	Cloudy	SC. STR
1 25 E	"	"	"	"	8-8-8	"	200/70		SC. STR
01 14 E	"	2"	"	"	8-8-8	"	200/70		SC. STR
1 10 E	"	"	"	"	8-8-8	"	200/70		SC. STR
0 55 E	"	"	"	"	8-8-8	"	200/70	Pole wobbed about ½° both ways	SC. STR
0 44 E	"	"	"	"	8-8-8	"	200/70	Cloudy	SC. STR
0 34 E	"	"	"	"	8-8-8	"	200/70		SC. STR
0 17 E	"	"	"	"	8-8-8	"	200/70	Heavy cloud	SC. STR
00 01 W	"	"	"	"	8-8-8	"	200/70	½ time at zenith cloudy	SC. STR
0 13 W	"	"	"	"	8-8-8	"	200/70	Cloudy	SC. STR
0 25 W	"	1-4	"	—	8-8-8	"	200/70	Aurora; exhibiting ~~[illegible]~~ ~~[illegible]~~ + unbelieved flat?	SC. STR

Con't #2

265

Date Nov 1-2/71 Cont'd **Observer** **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35463	12 Lac	22 37.0	+39 43	Grz	IIaG Unfiltered	13/.5		20 41	20 50	A
35464	"	"	"	"	"	"		20 51	21 03	C
35465	"	"	"	"	"	"		21 05½	21 12½	B
35466	"	"	"	"	"	"		21 14	21 23	A
35467	"	"	"	"	"	"	50	21 24	21 33	B
35468	"	"	"	"	"	"	"	21 34½	21 47	C
35469	"	"	"	"	"	"		21 49	22 00½	A
35470	"	"	"	"	"	"		22 02	22 17	B
35471	"	"	"	"	"	"		22 08	22 44	C
35472	"	"	"	"	"	"	49°F	22 45	22 55	A
35473	"	"	"	"	"	"		22 56	23 11	C
35473	F1	Focus		"	"	13	49°F			B
73	Calibration for, Cat			63-73						

Dome Temp. .....

Focus .....

Dome Temp. 41°F H: 80%

Transparency Conditions Semi clear

Thick cloud by 22:30

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
W0 36	+40 10	2-3	5.1	B2 II	8-8-8	Hd *	200/70		FINE
W0 48	"	"	"	"	8-8-8	"	200/70		FINE
W0 58	"	"	"	"	8-8-8	"	200/75	BOTH PLATES NUMBERED 65	FINE
01 06 W	"	"	"	"	8-8-8	"	200/71		FINE
1 17W	"	"	"	"	8-8-8	"	200/70		
01 32W	"	"	"	"	8-8-8	"	200/69	Clouds 1/2 time at 21:42	FINE
0245W	"	"	"	"	8-8-8	"	200/70	"	FINE
02 01W	"	"	"	"	8-8-8	"	200/70	1/2 counts at 22.12 clouds	FINE
02 29W	+40 11	"	"	"	8-8-8	"	200/70	1/2 counts at 22 34 clouds	FINE
02 41W	"	"	"	"	8-8-8	"	200/70	clear	FIVE
02 57W	"	"	"	"	8-8-8	"	200/72	1/2 counts at 23 05 clouds	
	[illegible]				8/3	[illegible]			

267

* unbaked

Date Tue/Wed Nov 2/3/71 **Observer** Bh-Tu-Sl **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
~~354 71~~	~~HD 19209~~	~~20 12.3~~	~~+49° 24'~~	~~G-2~~	~~IIaO*~~	~~9/.5~~		~~20.34~~		~~A~~

Dome Temp. 47°F H = 66%

Focus

Dome Temp.

Transparency Conditions cloud alto-stratus 9/10ths

268

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
~~[illegible]~~	~~+47 45~~	~~4.5~~	~~5.42~~	~~KO+ A3~~	~~8-~~	~~Alm Eq~~	~~200~~	~~Closed due to cloud~~	

* baked Nov 2/3

269

Date Wed/Thur Nov 3/4 '71 **Observer** Blu/GH + SME **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35474	HD191610	20 05.7	+36 33	6-12	IIa-O*	13/.5	50°F	17:46	17:54	A
35475	HDE 226868	19 57.6	+34 56	"	"	25/.3		17:58	21:12	B
35476	HD192909	20 12.4	+47 24	"	"	9/.5		21:16	22:12	C
35477	HD195592	20 27.2	+43 59	"	"	13/.5		22:15	00:01	A
35478	HD 13554	02 9.5	+56 36	G43	"	13/.3	45°F	00:39	00:57	B
~~35479~~	~~[illegible] - 56~~	~~02 7.5~~	~~+56 37.4~~					~~01:12~~	~~01:20~~	~~C~~
35479	HD 41131	06 15.0	-02 54	"	"	"	4°F	03:22	03:32	A
~~35480~~	~~NGC 2169-3~~	~~06 02.8~~	~~+13 58~~	~~"~~	~~"~~	~~"~~		~~03:44~~	~~0~~	~~B~~
35479 F	FOCUS				"	12	49°F			

Dome Temp. 48° H=55%

Focus

Dome Temp.

Transparency Conditions Scattered Stratocumulus Clear by 19:00

270

Time T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1	[illegible]	00 17W	+36 51	2-3	4.82	B5Ie	8-8-8	Sp. Bin-Bln	40/15		SL. STR
2	[illegible]	03 45W	+35 14	3	9.74	B0Ib	7-7-7	"	800/300		V SL. STR
12	[illegible]	04 30W	+47 44	3-4	5.42	K0 + A3	9-9-9	Atm Ecl.	200/290		FINE
[illegible]	[illegible]	06 04W	+44 17	3-4	6.91	O9.7Ia	8-8-8	Sp. Std.	400/171	some cloud	FINE
[illegible]	[illegible]	[illegible]	+16 59	3-4	6.2	B1Sg	3-3-3	RV std	200/30	broken - 2 pm ≈	STRONG
[illegible]	[illegible]				2.94	[illegible]	3-	SH-cluster	200/[illegible]	~~[illegible]~~	
[illegible]	[illegible]	00 12E	-2 51	3-4	6.5	M1	3-3-3	RV. std.	400/60	clear	FINE ~~SL STR~~
[illegible]	[illegible]			5	1.37	K)	3-	~~[illegible]~~	~~200~~/17	CLOUDS! AGAIN!!	
							18/19				

291

* baked Nov. 2/3/71

Date Thurs/Fri Nov. 4/5/71 **Observer** SI /GI **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35480	City lights off clouds	—	—	G-12	IIa-Ob*	13/1.2		20:10	23:00	A
35481	HD 51418	6h 52.2m	+42° 26'	"	"	9/1.5	39°F	23:27	00:37	

Dome Temp. 34°F H=64%

Focus

Dome Temp.

Transparency Conditions OVERCAST — ALTO-STRATUS / CIRRUS TO CLEAR

272

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
h m 00 00	-26° 22'	—	—	—	10-10 -10		800/Nil.	overcast till 22:10 → HIGH CIRRUS till 23:00 *	
[illegible]	+42° 26'	4"	6.61	A0p	8-8-8	G1 Apam	400/104	[illegible]	FIVE
								* Fe COMP LOOKS FUNNY — MAY HAVE CUT OFF CENTRE SPECTRUM — Hg FAIL SHOULD BE COBWEBS	

Time G.T.	PM
[illegible]	-
[illegible]	[illegible]

373

* baked Nov 2/3/71

Date Fri/Sat Nov 5/6 '71 **Observer** Blu-Sl **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35482	HD 191610	20 05.7	+36 33	6-12	IIa-O*	9/.5		18:16	18:30	A
35483	HD 192909	20 12.4	+47 24	"	"	9/.5	46°F	18:32	19:12	B
35484	HDE 226868	19 54.6	+35 56	"	"	17/.3		19:17	22:13	C

Dome Temp. 48° H=69 %

Transparency Conditions Lots of clouds - poor

Focus

Dome Temp.

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
30		01h02W	+36°51	1-2	4.22	133Ve	8-8-8	Sp, Bin-Blu	200/80		FINE
2		51 38W	+47°44	4	5.42	K0+ A3	8-8-8	Atm. Ech	200/350		FINE
13		54 57W	+35 13	"	9.74	130Ib	8-8-8	S, Bin-Blu	800/224	Anson: Overdevelop please, At rh end of box	FINE

275

Sun/Mon

Date ~~Sat/Sun~~ Nov. 7/8/71 Observer SI-Cb/SI Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35485	AC Her	18 26 02	+21 47.9	G-12	IIa-O	13/3		18:08	20:00	A
35486	HD 216489	22 48.2	+16 19	"	"	13/5	34°F	20:05	21:07	B
35487	HD 14951	02 19.3	+10 09	"	"	9/5		23:25	00:06	C
35487F	Focus			"	"	9	31°F			A
T1					IIO6					
TL					IIO0					

Dome Temp. 28°F H = 75%

Transparency Conditions Excellent

Focus

Dome Temp. 25°F H = 70%

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04h 18 W	+21° 58'	2-3	7.4 9.6	F2-K4	8-8-8	Var. Dy	400/125	*	FINE
01h 05 W	+16° 47'	2	6.7	K0	8-8-8	G1001 Sp-Bin. Cp	400/237	clouds 8:55 - snow	FINE
00h 31 W	+10° 35	2-3	5.38	B-6	8-8-?	Sp Bin. Bin	200/86	first comp on at slit = 13:1.5 (no star light at slit 13) →	broken
					3/3	no filter.			SC CENTRE TO [illegible]

* Anson, could you overdevelop these two please. in tray #2

277

*unbaked

Date Mon Tues 8-9/74 Observer NL-51 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35488	12 Lac	22 37.0	+39 45	Grix	IaO*	13/4		17 49	1757	A
35489	"	"	"	"	"	"	33F	18 00	1807	B
35490	"	"	"	"	"	"		18 09	1816	C
35491	"	"	"	"	"	"		18 17½	18 26½	A
35492	"	"	"	"	"	"		18 28	18 36½	B
35493	"	"	"	"	"	"		18 38	18 45½	C
35494	"	"	"	"	"	"		18 47	18 54½	A
35495	"	"	"	"	"	"	33	18 56	19 05	B
35496	"	"	"	"	"	"		19 06½	1916	C
35497	"	"	"	"	"	"		1918	1925½	A
35498	"	"	"	"	"	"		1927	1937	B
35499	"	"	"	"	"	"		1938	1947½	C
35500	"	"	"	"	"	"		1949	1957½	A
35501	"	"	"	"	"	"		1959	~~19~~ 2C 09	B
35502	"	"	"	"	"	"		20 10½	19 19½	C

Dome Temp. 25°F H=63%

Transparency Conditions Excellent

Focus

Dome Temp.

278

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 50 E	+40 10	2	5.1	Bz II	8-8-8	Hol-0	200/80		
01 41 E	"	"	"	"	8-8-8	"	200/80		
01 32 E	"	"	"	"	8-8-8	"	200/81		
01 21 E	"	"	"	"	8-8-8	"	200/81		
01 11 E	"	"	"	"	8-8-8	"	200/81		
01 02 E	"	3	"	"	8-8-8	"	200/80		
00 53 E	"	"	"	"	8-8-8	"	200/80		
00 42 E	"	"	"	"	8-8-8	"	200/50		
00 31 E	"	"	"	"	8-8-8	"	200/82		
00 21 E	"	"	"	"	8-8-8	"	200/80		
00 10 E	"	"	"	"	8-8	"	200/80		
00 00	"	"	"	"	8-8-8	"	200/80		
00 10 W	"	"	"	"	8-8-8	"	200/80		
00 21 W	"	"	"	"	8-8-8	"	200/80		
00 32 W	"	"	"	"	8-8-8	"	200/80		

279 * unbaked ** baked 1 hour 2/3/71

Date Mon/Tue 8-9/71 (cont'd) **Observer** H.L.S/Dy-S **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35503	12 Lac	22 37.0	+39 43	G-12	IIa-O*	13/.4		20 21	20 29½	A
35504	"	"	"	"	"	"	32°F	20 31	20 40	C
35505	"	"	"	"	"	"		20 41	20 50	B
35506	"	"	"	"	"	"		20 51	21 03	A
35507	"	"	"	"	"	"		21 04	21 15	B
35506 8	"	"	"	"	"	"		21 17	21 26½	C
35507 9	"	"	"	"	"	"		21 27½	21 36	A
35508 10	"	"	"	"	"	"		21 37	21 45½	B
35509 11	"	"	"	"	"	"		21 46½	21 56	C
35510 12	"	"	"	"	"	"		21 57½	22 05½	A
35511 13	"	"	"	"	"	"		22 06½	22 15½	B
35512 14	"	"	"	"	"	"		22 16½	22 25½	C
35513 15	"	"	"	"	"	"		22 25	22 35	A
35514 16	"	"	"	"	"	"		22 36	22 45½	B
35515 17	HD 12638	01 58.7	+35 27	"	IIa-O**	13/.3		22 53	00 22	C
35516 18	CO AUR	05 53.8	+35 19	"	"	13/.3		00 29	02 [illegible]	

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

280

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00 41W	+40 10	2	5.1	B2III	8-8-8	[illegible]	200/80		
0 52W	"	"	"	"	8-8-8	"	200/80		
1 02W	"	"	"	"	8-8-8	"	200/81		
1 15W	"	"	"	"	8-8-8	"	200/80		
1 27W	"	"	"	"	8-8-8	"	200/80		
1 38W	"	"	"	"	8-8-8	"	200/80	— 2 PLATES NUMBERED	
1 48W	"	"	"	"	8-8-8	"	200/80	35506 [illegible] PLATES 35506	
1 58W	"	"	"	"	8-8-8	"	200/80	+ ALL OTHER PLATES	
2 09W	"	"	"	"	8-8-8	"	200/90	ARE NUMBERED NCZ ??	
2 18W	"	"	"	"	8-8-8	"	200/82		
2 28W	"	"	"	"	8-8-8	"	200/81		[illegible]
2 37W	"	"	"	"	8-8-8	"	200/80		
2 48W	"	"	"	"	8-8-8	"	200/81		
2 58W	"	"	"	"	8-8-8	"	200/80	AT END OF LOT	
1 13W	25 54	"	8.26	G8III	8-8-8	[illegible]	800/350		[illegible]
1 05E	35 25	"	7.8-8.6	S5	8-8-	[illegible]	800/251	CLOUDS! ← ANSON!	[illegible]

281

Date Nov 8/9/71 cont'd Observer Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35516F	FOCUS					13	28°			
	calibration plate:				IIaO	UNBAKED				

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
					33	No filter.			GOOD

283

* dated Nov 9/10

Date Nov. 20/21 Sat-Sun/71 **Observer** Sy-Tn/Mel-Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35517	λ Psc	23 36.9	+1 14	643	IIaO*	13/3	34°F	21:26	21:48	A
35518	δ Cas			"	IIaO*	13/3	38°F	21:57	—	B
35519	"	"	"	"	"	"	"	22:01	22:03	C
35520	"	"	"	"	"	"	"	22:09	22:11	B
35521	"	"	"	"	"	"	"	22:12	22:16	A
35522	"	"	"	"	"	"		22:22	22:24	C
35523	"	"	"	"	"	"		22:26	22:29	A
35524	"	"	"	"	"	"		22:30	22:32	B
35525	"	"	"	"	"	"		22:34	22:41	C
35526	HD 37956	05 37.1	+29 10	G12	"	"		02:58	04:04	A
~~35527~~	~~9 Mon~~	~~07 29.3~~	~~-9 13~~	~~"~~	~~"~~	~~"~~		~~04 11~~	—	~~B~~
35527	HD 71393	08 29.4	+25 14	"	IIaO*	13/3		04 39	05 49	C
35528	HD 13702	10 44.0	-11 09	"	"	13/5		05 51	06 27	A
[illegible]				"	"	13	38°F			B

Dome Temp. 34°F H=58%

Focus

Dome Temp. 29° H=55%

Transparency Conditions Scattered cloud

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 47W	+1° 40′	2″	4.5	A5	6-6	Nova Del std	200/37	cloud & searchlight	STRONG
00 42W	+60 38	"	2	80Type	5-5	Sy	40/7		VERY STRONG
00 47W	"	"	"	"	10	"	40/7		VERY STRONG
00 56W	"	"	"	"	10	"	40/7		VERY STRONG
01 01W	"	"	"	"	10	"	40/6		VERY STRONG
01 09W	"	"	"	"	10	"	40/7		VERY STRONG
01 13W	"	"	"	"	10	"	40/7		VERY STRONG
01 17W	"	"	"	"	10	"	40/8		VERY STRONG
01 27W	"	"	"	"	10	"	40/6	cloud	VERY STRONG
02 04W	+29 17	"	7.9	K1	8-8-8	SSV	800/350		V.SL.WK
~~-9 38~~		~~2″-3″~~	~~3.0~~	~~NRO~~	~~8~~	~~Sy~~	~~300/~~	cloud; cancelled	
01 05W	+23 06	1″-3″	7.9	<SUB	8-8-8	SSV	400/175		FINE
00 39E	10 47	2-3″	5.29	A2V	8-8-8	Sp. [illegible]	200/32		FINE
					6-7	[illegible]		NO CENTRE TEMPER. SEN	

285

* based Nov 9/10

Date Nov 22-23 Mon/Tues 1971 **Observer** Hd-Tn/Gl-Tn **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35529	12 Lac	22 37.0	+39 43	612	IIaO *	13/5		17:38	17:54	A
35530	"	"	"	"	"	"	[illegible]	17 55	18 [illegible]	B
35531	"	"	"	"	"	13/.4		18 10	18:22	C
35532	"	"	"	"	"	"		18:23	18:33	A
35533	"	"	"	"	"	"		18 34	18:42	B
35534	"	"	"	"	IIaO	"		18 43	18:53	C
35535	"	"	"	"	"	"		18 59	19:04	A
35536	HD 12402	01 56.5	+27 56	"	IIaO *	13/5		19 10	20 18	C
35537	HD 12638	01 58.7	+25 27	"	"	" *	27°F	20 21	22:07	A
35538	HD 15256	02 22.3	+29 26	"	"	"	26°F	22:10	23:56	B
35539	HD 32192	03 29.4	+47 52	"	IIaO	9/.5	25°F	00:01	00:09	C
35540	HD 37202	05 31.7	+21 05	"	"	"	"	00:12	00:16	A
35541	HD 40457	05 53.8	+35 19	"	"	13/.3	24°F	00:24	02:36	B
35542	HD 41511	06 00.5	-16 29	"	"	9/.5		02:40	03:08	C
35543	HD 51418	06 52.2	+42 3[illegible]	"	"	"		03:13	04:11	A
35544	HD 45510	06 25.[illegible]	[illegible]	"	"	"	22°F	04:16	05:32	B

Dome Temp. 23°F H=62%

Focus

Dome Temp.

Transparency Conditions Excellent

286

Anson 1 extra unex. note plate left in for [illegible] of Exposed Box - for cal if you want.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
E 57m	+40 08	3"	5.1	B2 III	8-8-8	No. 4	200/80		STRONG
E 45	"	"	"	"	8-8-8	"	200/80		STRONG
E 31	"	"	"	"	8-8-8	"	200/80		STRONG
E 20	"	"	"	"	8-8-8	"	200/80		STRONG
E 11	"	"	"	"	8-8-8	"	200/80		STRONG
0 00	"	"	"	"	8-8-8	"	200/80		STRONG
0 11 W	"	"	"	"	8-8-8	"	200/80		STRONG
1 54 E	28 23	"	7.60	K1 III	8-8-8	SSV	800/300		FINE
0 07 E	25 53	"	8.26	G8 III	8-8-8	"	800/300		FINE
01 17 W	24 51	"	8.32	G5 III	8-8-8	"	800/300		FINE
00 22 W	48 12	2-3	4.1	B5e	8-8-8	G1 Shell	40/18		FINE
01 31 E	71 12	2"	2.99	B2	12-12	"	40/18		FINE
[illegible]	35 26	2-3	7.8-8.0	F5	8-8-8	Hy Rotor	800/300		FINE
00 53 W	-16 24	1-3"	5.2	Aeq	8-8-8	G1-Shell	200/100		FINE
01 03 W	142 26	2"-3"	6.61	A0p	8-8-8	G1-Apron	400/250		FINE
02 52 W	-6 01	2"	7.1	B3e	1-2	G1 Shell	400/200		FINE

#2 Cont

287

Date Nov 23 **Observer** G-Th **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35545	HD 50138	6h46m.7	-6° 51'	6.17	IIa-O	9/.5	22°F	05:36	06:26	C
35543-51	calibration	step	wedge		IIaO					
	for plate 35529 - 35538									

Dome Temp. .....

Focus .....

Dome Temp. 17°

Transparency Conditions .....

288

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03h 24m	-6° 49'	2"-3"	6.0	B8e	8-8-8	G1 Shell	400/	cut off limit	sl. u K
new	2/90 mm @		68°F		23 Nov 1971				

289

Date Thu-Fri Nov 25-26 1971 **Observer** R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35546	HD214946	22 36.7	+44 29	G-12	IIa O	13/.05	36°F	19:12	19:52	A

Dome Temp. 28°F H 80%

Transparency Conditions clouds S-W

290

Focus

Dome Temp.

Log Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
52		1713W	+44° 58	3	7.12	A2	8-8-8	SPEC. BIN.	400/~~25~~	clouds	FINE
										- DEC. 12 MIN	
										SW MOV - 2	

291

Sensitized Nov 30 1971
* ** Baked Nov 22-23

Date Tues Wed - Nov 30 Dec 1 **Observer** Cl - Cu - Ri / Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35547	HD 210027	22 02.3 1960	24°51 1938	G-12	I-N*	13/.5		21:45	22 40	A
35548	BS 1017	03 21.5	49°43	G-12	I-N*	13/.5	26°F	22:50	23:02	B
35549	BS 1122	03 40.1	47°40	"	"	"		23:10	23:50	C
35550	HD 25224	06 02.7	+13°59	G/2	IIa-0 **	17/3	25°F	00:30	02 25	A
35551	"	"	"	"	"	"	23°F	02:07	03:40	B
35552	"	"	"	"	"	"	20°F	03:43	05:21	C
35552 F1	[illegible]	[illegible]	[illegible]	G/2	IIa-0	9	20°F			B
35556 F1	calibration				IIa-0 **					

Dome Temp. 20°F H72%

Focus 50R

Dome Temp. 15°E 78%

Transparency Conditions good after 21.0

292

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
4 57 W / 1h 43W	25° 20'	3	3.76 I-3.12	F5II	Near 90-90-90	A 410Y	80/205	40 min } 3-19, 5 min	WET
[illegible]	+49°50'		1.80 I-1.02	F5Ib	90-90-90		80/175	8 min } in exposed Box #2	SL. UK
[illegible]	+47°46		3.03 I 3.10	B5III	90-90-90		80/465	45 min }	[illegible]
[illegible]	+14°05	3		B1	8-8-8	G1031	800/180	}	FINE
[illegible]	"			"	8-8-8	"	80/180	} exposed Box #1	FINE
[illegible] 35W	"			"	8-8-5	"	80/170	}	FINE
					3-3	no fixt			CENTRE TO VIGNET

293

* Vol of Rev 35/25/31

Date Dec 1-2/21 Wed-Thurs **Observer** Ch-Jn/Jn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35553	HD 213389	22h 25.9	+48° 51	G12	□ oO	13/.5	24°F	17:48	20:18	A
35554	HD 216489	22h 48.2	+16° 19	"	"	"	22°F	20:28	21:42	B
35555	HD 36526	5h 27.2	−1° 40	"	□ oO*	9/.4	20°F	21:57	00:45	A
35556	Tr 2-1	2 30.2	+55 32	G43	"	13/.4	"	01:10	02:08	B
35557	Tr 2-2	"	"	"	"	13/.3	"	02:10	03:10	A
35558	29 Per	03 11.5	+49 51	"	"	"	"	03:19	03:25	B
35559	NGC 2169 #3	06 02.8	+13 58	"	"	"		03:35	05:31	C
35560	" #2	"	"	"	"	"		05:33	06:21	A

Dome Temp. 18°F H=70%

Focus

Dome Temp. 13° H=78% Cold

Transparency Conditions Excellent

Thin cloud 23h but Full Moon

294

ng Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1x	0212W	49° 18'	2"-3"	7.52	K1	8-8-6	G1001-Cb	400/320	planyer in in position for half exp.	FINE
42	0033W	16 48	2"-3	6.72	K0	8-8-8	"	400/320		FINE
45	0022E	-1° 31'	"	8.2	B8	8-8-8	He-weak B *'s -Cb	800/250	Full Moon some cloud problem	FINE
51	0357W	+55 54	2"	9.17	≈K	3-3-3	GH-Cluster	800/170		FINE
10	0500W	+55 58	"	8.81	A8 II	3-3-3	"	800/110		V.SL.STR
51	0433W	+50 14	"	5.1	B3	5-5	std vel	200/30	NW star sep = 8'	STRONG
31	0317W	+14 07	"	7.37	≈K	3-3-3	GH Clust	800/150	moon 2h west (some haze) broken 1/2	FINE
21	0440W	+14 05	2-4"	8.12	≈B	3-3-3	"	800/95		(GUIDING) FINE

295

* baked Nov 25/76

Date Dec 2-3/71 Thurs-Fri **Observer** T.n.-Dc / **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35561	Stock 2-7	02 03.5	+59 33	643	IIaO*	13/3		17:42	18:14	A
~~35562~~	~~Stock 2-160~~	~~02 12.5~~	~~+59 34~~	~~"~~	~~"~~	~~"~~		~~18:28~~		~~B~~

Dome Temp. 20°F H= 78%

Focus

Dome Temp.

Transparency Conditions Excellent but complete cloud after midnite

296

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
:14	03 28E	+59 55	2"	7.0	FE	3-3-3	GH Clust	200/32		SL STR
			"	8.20	G8	3-	"	800	cancelled cloud	

297

Date Dec 3-4/71 Fri-Sat Observer T M Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
35562	HD 192909	20 12.4	+47 24	612	II a O	91.5	33°	17:53	18:23	A

Dome Temp. 25° H= 85%

Focus

Dome Temp.

Transparency Conditions Scat cloud but thin thick like last night

298

...ing Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
23		02 40W	47° 43′	2"	5.42	K0+ A3	8-88	G1001-0c	200/70	thick cloud	(Gaiomc) sl. wk

299

25/26

Date Dec 4-5, 1971 Sat-Sun Observer mfl McN Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
	~~HD 23257~~	~~03 38.5~~	~~+37 37~~	~~6 n~~	~~IIaO6~~	~~13/3~~		2237		A
35563	HD 21364	03 21.8	+09 23	6 n	IIaO6*	13/0.5		2310	2312	B
35564	HD 28446	04 24.1	+53 42	"	"	"	28°F	2323	0005	C
35565	HD 37956	05 37.1	+29 10	"	"		25°F	0011	0149	A
~~35566~~	~~HD 72545~~	~~06 06.3~~	~~+16 09~~					01		
651	calibration	for	35562		IIaO					
52	"	"	35543-5		IIaO6					

Dome Temp. 19°F – H=67%

Focus 50 - R

Dome Temp.

Transparency Conditions Very hazy – [illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
			7.60	B5V	8-	SSV	5/1	Too [illegible] & [illegible] long!	
00 15N	+09 49	>5"	3.66	B8p	12-12	Bln Sp Bin	40/20	terrible seeing!	SL. STRONG
	+53 56	"	5.22	B0III	8-8-8	Bln Sp Bin	200/100	need bining – [illegible]	STRONG
03 42W	+29 16	~3"	7.96	K1III	8-8-8	SSV	300/290	[illegible] temp. [illegible]	FINE
			4.73	B5V		Bln Sp Bin		Clouded over closed up 0300	

changed to -12
focus to 6

301

* baked Nov 25/26 (sorry)
** baked Dec 9/10

Date Dec 11-12/71 Sat-Sun **Observer** Tn / Ta-MKA **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35566	Stock 2-160	02 12.5	59 34	643	IIaO*	13/3	43°F	17:28	18:12	A
35567	Stock 2-119	02 04.2	59 34	"	"	"		18:16	20:16	B
35568	Stock 2-7	02 03.5	59 33	"	"	"	43°F	20:18	20:50	C
35569	Stock 2-40	02 06.1	59 31	"	"	"	42°F	20:53	23:39	A
35570	HD13854	02 09.9	56 36	"	"	"		23:42	00:02	C
35570 F1	Focus	test		"	IIaO	13	40°F			B
35571	HD31367	04 54.2	+25 00	6-12	IIaO**	13/0.3		00 19	03:19	A
35572	HD56176	07 10.9	+26 53	"	"	"	37°F	03 22	04:12	B
35573	HD71093	08 20.9	+23 14	"	"	"		04 14	04:46	C
35574	HD89449	10 14.3	+19 59	"	"	"		04 48	05 02	A
35575	HD118905	13 34.8	+27 12	"	"	"		05 09	06:29	B
35576	HD110411	12 36.8	+10 47	"	IIaO	13/5		06 35	06:47	C
35576 F1	Focus			"	IIaO	13	35°			B
35577	HD130109	14 41.2	+2 19	"	IIaO	13/05	35°F	06 50	07 30	A

Dome Temp. 34°F H = 60%
Focus 70-R (from 50-R)
Dome Temp. 20°F H = 82%

Transparency Conditions Excellent

g Time S.T.	PH	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
:12	-	03 04E	+59 58	2"	8.20	G8	3-3-3	GH-Clust	800/125		V.SL.WK
:16		0050E	+59 56	2-3"	9.51	gK2	3-3-3	"	800/135		SL.WK
:50		0015E	+59 56	3-4"	7.00	F5 II	3-3-3	"	200/30		FINE
:39		0230W	+59 54	"	8.75		3-3-3	"	800/125	very slow - some haze	FINE
:02		0250W	+57 01	3-5"	6.2	B1	3-3-3	std vel	200/28		FINE
			in/out	out			10/10	filter in			CENTRE TO VIOLET
19		0325W	+25 12	2-3"	8.86	G2 V	8-8-8	SSV	800/300		FINE
12		0200W	+26 51	2"	7.40	G2 III	8-8-8	"	400/160		FINE
46		0125W	+28 05	1-2"	7.4	K III	8-8-8	"	400/180		FINE
02		0012E	+19 42	2"	5.3	F5	8-16	std vel	200/80		STRONG
21		0205E	+26 57	"	8.46	K1 III	8-8-8	SSV	800/340	DEC CLAMP WON'T OPEN!	FINE
47			+10 28	"	4.97	A1 V	8-8-8	spec-Elv	200/90		FINE
		in/out					3/3	no filter			V.SL. CENTRE TO RED
		02 41E	+02 04	3"	3.74	A0 I	12-12	Bin sp. bin	40/16		VERY STRONG

303

* baked Dec 9/10

Date Dec 13/14 Mon-Tues **Observer** TH **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35578	HD51418	06 52.2	+42 26	612	IIaO*	91.5	32	03:55	05:45	A

Dome Temp. 23°F H-68

Transparency Conditions Scat cloud but good

Focus

Dome Temp.

many meteors (very fast) Gem [illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
4 00W	-42 30	2"-3"	6.61	A0p	8-8-8	61-Apim	400/140	Cloud mainly	FINE

Date Thu Fri Dec 16-17 **Observer** Ro - R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35579	HD 14392	02 14 21	+49°42	G-12	IIaO	9/.5		00:17	01:16	A
35580	HD 27192	04 12 37	+50°41	"	"	"	36°F	01:27	02:37	B
35581	HD 63630	07 44.8	+46 12	"	"	13/.5		02:46	03:54	C
35582	HD 98664	11 16.0	+06°35	"	"	"	34°F	04:11	04:23	A
35583	HD 82191	09 25.4	+27°56	G-12	IIaO	13/0.5		04:30	04:54	B
35583A	focus test	09 25/	"	G-12	IIaO	9	33°F			B
35583 P.	calibration	step	nudge		IIaO				17 Dec, P.	

Dome Temp. 30°F 78%

Focus

Dome Temp. 26° 80%

Transparency Conditions

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
20W	50°07	3#	558	A5i	8-8-8	G1001 Ro	400/200	Fe COMPARISONS ARE ALL A BIT WEAK - MAYBE 30 SEC TOTAL EXPOSURE	FINE
44W	50°57		550	B2 III	8-8-8	"	400/200		FINE
27W	+46°06	3	653	A3	8-8-8	Spect. Bri	400/200		FINE
33E	+06°19'		4.06	B9 I	12-12	G1001 Cb	90/40		FINE
46W	+27° 37'		659	A0	8-16	Spect. Bri	400/400	checked over	WEAK
					3-3	no faith			GOOD
Thu UP c/ 40 min @ 68°F (2 roc 1a1)									

307

Date Fri Sat Dec 17-18 1971 **Observer** Ri-Ro **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35584	HD 21041.8	22 05.2	+05° 42	G-12	IIaO	9/0.5	33°F	17:33	17:54	A
35585	HD 3881	00 36.3	+59° 23	G-12	IIaO	13/0.5		18:02	20.17	3
35586	HD 16895	02 37.22	+48° 48	G-12	IIaO	9/0.5	28°F	20 29	20:55	C
35587	HD 14770	02 17.46	+49° 33	G-12	IIaO	9/0.5	28°F	21:05	22.23	A
35588	HD 19373	03 01.51	+49° 14	G-12	IIaO	9/0.5	26°F	22:40	23:12	3
35589	focus Test	[illegible]	[illegible]	G-12	IIaO	9	26°F			3

Dome Temp. 24°F 68%

Focus

Dome Temp. 22°F 76%

Transparency Conditions clear very calm
some clouds at 23.00

...ng Time ...S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
5	1:14 11W	+060 10	3	4.01	A2 V	10-10-10	Spect Bi Bl	200/100		FINE
7	1:07W	+59° 50	3	7.35	A6	10-10-10	Spect Bi 6 2	400/200		FINE
55	0:20E	+49° 10		4.12	F IV	10-10-10	G1001 Ro	200/180		FINE
3	1:36W	+49° 57'		5.33	g 8 III	10-10-10	G1001 Ro	200/180		FINE
12	1:31W	+49° 35	3	4.04	g0 V	10-10-10	G1001 Ro	200/106	[illegible]	FINE
						3-3 no filter				GOOD

Date Sat Sun Dec 18-19 1971 **Observer** R.-R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35589	HD 2905	00 27h19s	+62°23	G-12	IIaO	9/0.7	22°F	17:30	17:43	A
35590	HD 12303	01 55.6	+54°00	G-12	IIaO	9/0.5		17:50	18:21	B
35591	HD 12216	01 54.9	+71°56	G-12	IIaO	9/0.5	20°F	18:30	18:50	C
35592	HD 14872	02 18.57	+49° 50	G-12	IIaO	9/0.5		19:05	20:00	A
35592F1	focus test	on and/or		G-12	IIaO	9				B
35592 T.	calibration	step wedge			IIaO					
	for plates	35584 – 35592								

Dome Temp. 15°F 67%

Focus

Dome Temp. 14°F 68%

Transparency Conditions thick hazy coming up for the Sound

3/10

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1-19E	+62° 52	4	4.15	B1Ia	10-10-10		80/46		FINE
2 09E	+54° 25'	4-5	4.89	B8I	10-10-10	Spec Bi Bln	200/100		FINE
1 42E	+72° 24'	4-5	4.08	A1I	10-10-10	"	200/100		FINE
0 45E	+50° 15'		4.72	K4III	10-20	G1001 Ro	400/70	hazy	VERY WEAK
					3-3	no filter		CENTRE CUTOFF	
NWP-2/9.0 mm @ 68° F (2 AO CIGI)									

311

* Baked Dec 17-18

Date Tues - Wed Dec 22-23 1971 **Observer** Cb-P1-51 **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35593	HD 213389	22 25.9	+48° 51	G-12	IIa0	13/0.5		18:35	19:21	A
~~35594~~	~~HD 37140~~	~~05 31.2~~	~~-00° 22~~	~~G-12~~	~~IIa0~~	~~13/0.5~~	~~34°F~~	~~19:42~~		~~A~~
~~35594~~	~~HD 37321~~	~~05 32.6~~	~~-09° 30~~	~~G-12~~	~~IIa0.5~~	~~13/.5~~		~~20:29~~		~~C~~
35594	X Per	03 49.08	+30 45.1	"	"	13/.5		00:23	01:05	A
								01:35	03:02	
35595	HD 87504	10h 00.15	-12° 35'	"	IIa0	13/.5	26°F	03:10	03:37	B
35596	HD 62044	07 34 04	+29° 08	"	IIa0	13/.5	25°F	03:45	04:33	C
35597	HD 98664	11 16.3	+ 0° 35	"	"	13/.5		04:42	05:00	A
35598	HD 87504	10h 00.15	-12° 35	"	"	"	24°F	05:05	05:32	B
35599	HD 183702	19h 44.6	+41° 04	"	"	13/.5		05:37	06:17	C
35600	HD 100481	12h 36.8	+10° 47	"	"	13/.5	22°F	06:21	06.53	A
35600	calibration step wedge for plates 35595 - 35600									
					IIa0				22 Dec 71	

Dome Temp. 28°F 74%

Focus

Dome Temp. 14°F 65%

What a night

Transparency Conditions clear at 18:00 clouded again at 18:45 cleared at 19:15

3/2

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
29h 40m W	+49° 26'	2	7.52	K1	10-10-10	G1001 Cb	200/160	clouds WRONG STAR	VERY STRONG
	too slow		8.6	B9	10-	~~G1001 Cb~~	800/	with pin broken die.	
	-01° 35'	3	7.0	B8	10-	Cb-Thesis	200/	clouded n.d. a.f. or w. fuzzy	
	+31° 04	3-5	6.6	B0	10-10-10	Sv IP	400/180	SI/Ri cloud-cirrus 00:40 intermittent cloud	FINE
04h 51m W									
00h 14m E	-120 50'	11	4.51	B8V	10-10-10	Cl-Thesis	400/200		V.SL.STR
02h 33m W	+29° 03°	3	4.3	K1III	10-10-10	G1001 SLC	400/320		FINE
00h 37m E	+06° 18'		4.6	B9I	10-10-10	G1001 Cb	200/100		V.SL.STR
01h 12m W	-120 48'		4.51	B8V	10-10-10	"	400/200		V.SL.STR
101h 15m W	+10° 48'	3	5.29	A2V	10-10-1	Spec Bubble	400/200		V.SL.STR
00h 04m W	+10° 30'		4.97	A1V	10-10-	Sp. Eng.	400/200		V.SL.STR
00h 00m 2	19.0 min @ 68° K				(2400 c 16r)				

* baked Dec 2

313

Wed - Thurs

Date 1971 Dec 22-23 **Observer** Th GH/mcd **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35601	Stock 2-11a	02 04.2	59 34	G43	IIa0*	13/.3	22°F	17:38	20:36	A
35602	HD 8854	2h 14.8	+56 57	"	"	"	22°F	20:40	21:04	B
35603	Stock 2-53	02 7	+55°17	"	"	"		21:21	00:01	A
35604	X Per	03 49.1	+30 45.1	"	"	13/.5		00:09	01:15	C
35604 F1	Focus			"	"	13	20°F	C		B
35605	14 Aur	05 08.9	32 34	G12	"	7/.5		01:33	03:31	A
35606	HD 93702	10 44.0	+11 04	"	"	13/.5		03 38	04 02	B
35607	HD 110411	12 36.8	10 47	"	"	"		04:05	04:59	C
35607 T1	calibration	strip exposure for plates 35601 - 35607								
					IIa0b			"	28 Dec 71	

Dome Temp. 18°F H = 68%

Focus

Dome Temp. 12 H = 72%

Transparency Conditions Excellent at first
Cirus cloud by 20h
Thick Cloud 23h

3/4

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
0h 12W	+59 55	1"-3"	9.51	gK2	3-3-3	GH-Cluster	800/130	cloud 3/	FINE
0h 36W	57 01	2"	6.2	B1sg	3-3-3	std vel	800/125		STRONG
3h 36W	58 41	2-3"	8.91	(B)	3-3-3	GH-Cluster	800/120	cloud	SL STR
03 08W	31 03	"	6.6	Op	3-3-3	Sudb	800/120	"	SL STR
	[illegible]	[illegible]	[illegible]		10/10	filter in			CENTRE TO VIOLET
04 05W	32 44	2-3"	5.20	A9V	10-10-10	Eq width	400/200	Cloud	FINE
01 00E	+10 48	3"	5.29	A2V	10-10-10	Dim Spec B-N	400/200		SL STR
01 54E	+10 29	"	4.97	A1V	10-10-10	"	400/190	Complete cloud	SL STR
Follow-2/9.0 min @ 68°F									

315

Date Dec 28/29, 71 Tues/Wed **Observer** Ch-Tn/ **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35603	HD 216489	$22^h 48.2$	$+16° 13$	G 12	IIaO*	13/.5	30°F	18:05	18:55	A
35° 658 T.	calibration of wedge				IIaO				29 Dec 71	

Dome Temp. 25 73%

Focus

Dome Temp.

Transparency Conditions Suddenly very good 3/4
Solid Cloud soon after

ng Time S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
55		2 16W	+16° 50	2"	6.72	K0	1040	Cb - G1001 Binary	400/126	Cloudy Cloud	(GUIDING) FINE
		WWP · 2 / 15 mm @	68° F								

317

* Dated 22/23/71

Sun - Mon

Date Jan 2-3/72 **Observer** GH-Jn / TH **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35609	X Per	03 49.1	+30 45	612	IIaO*	13/5	33°F	20:53	21:29	A
35610	NGC 1502-59	03 58	+62 03	643	"	13/3	31°F	21:56	23:38	B
35611	NGC 1502-B	03 59	+62° 03	"	"	"	"	23:42	00:10	C
35612	NGC 1502-A	"	"	"	"	"	30°F	00:14	00:44	A
35613	HD 29587	04 31.5	+41 57	"	"	"	"	00:50	01:36	B
35613 F1	focus			"	"	13	30°F			B
35614	HD 73702	10 44.0	+11 04	512	"	13/5	"	02:26	02:46	A
35615	HD 110411	12 36.8	+10 47	"	"	"	"	02:52	03:12	B
35616	HD 107325	12 15.3	-27 11	"	"	"		03:16	04:16	C
35617	HD 130109	14 41.2	+2 19	"	"	"		04:21	04:33	A
35618	9 Lib	14 45.4	-15 38	"	"	"	28°F	04:45	04:57	B
								~~05:10~~		
35618 T1	calibration setup		nudge		IIaO				3 Jan 72	

Dome Temp. 25°F H: 80%

Focus

Dome Temp. 20° H: 76%

Transparency Conditions Very Windy Good by 30h

Changed Cl drive fuses

g Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]	[illegible]	0005W	31 04	2-3"	V= 6-6.6	Cpe	10-[illegible]	5 vdk *	400/200	bottom 1" off	(GUIDING) FINE
738	[illegible]	2 04 W	+62 22	"	9.12	(F)	3-3-3	GH-Cluster	800/130		FINE
10	[illegible]	2 34W	+62° 22	"	7.38	(B)	3-3-3	"	400/50		STRONG
[illegible]	[illegible]	3 07 W	+62° 21	"	7.41	(A)	3-3-3	"	400/50		STRONG
[illegible]	[illegible]	3 18W	+62 09	3"	7.7	G2	3-3-3	std vel	400/40	clouds!	FINE
		in m/ out out			10/10		folder in				CENTRE TO VIOLET
46	A	01 31E	+10 48	3-4"	5.29	A2 V	10-10-10	gBin-Blu	400/200	some cloud	SL. STR
12	[illegible]	0259E	+10 29	4-5"	4.97	A1 V	10-10-10	"	200/90	"	SL. STR
16	C	01 33E	+26 54	1-5"	2.55	gK2	10-10-10	"	200/140	seeing getting better	FINE
[illegible]	-	0340E	+2 08	4-5"	3.74	A0 V	10-9-10	"	200/90	more cloud	FINE
57	[illegible]	0320E	-15 48	5-8"	2.89	Am	14-14	"	200/90	"	FINE
										mod cloud	
[illegible]		Total: 2/40 min @ [illegible]								Closed 05:35	

319

X Lost Dec 28/29

Date Jan 3-8/72 (Jan 1972) Observer Hd Ta Hux Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
~~35619~~	~~HD 12402~~	~~01 56.5~~	~~+27 56~~	~~G-12~~	~~IIaO~~	~~13/.3~~		~~17 38~~		~~B~~
~~35619~~	~~X Per~~	~~03 49.1~~	~~+30 43~~	~~G12~~	~~IIaO~~	~~13/.3~~		~~19 35~~		~~C~~
35619 T1	Test for plate centre	Tilted grating on the rev. of screw						[as original test] counterclockwise		A
35619 T2	" " "	"	"	"	"	"	"	" " " "	clockwise of original test.	B

T1 is close to where the plate centre used to be (several months ago) so I rotated the tilt to the position corresponding to T1

Hd.

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....Cloudy.....

320

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	~~28 22~~		~~31~~	~~65 I~~	~~8~~	~~5 8 V~~	~~300~~		
	~~31 03~~	~~2"-3"~~	~~V= 60-66~~	~~0 p~~	~~10~~	~~5 V~~	~~400~~		
					3 s				
					3 s				

321

* Baked Dec 28-29
* sensitized Jan 5-6

Date Wed-Thurs Jan 5-6 1972 **Observer** Cb-Ri / Cf+Ch-Ri **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
35620	HD 3360	0h 31.4	+53° 21	G12	IIa-O*	13/5	20°	17:35	17:41	A
35621	HD 24534 (Rev)	03h 43.0	+38° 45.1	G12	IIa-O*	13/5		17:50	19:16	B
35622	HD 21699	03h 25.0	+47° 41	"	"	"		19:26	20:10	C
35623	HD 36526	05h 27.2	-1° 40	"	"	"	16°F	20:12	21:44	A
35623F1	focus test	2 mm/min		G-12	IIa-O	9	14°F			B
35624	HD 47105	06 32.0	+16° 29'	G-24	1-N**	13/.5	1	02:39	03:02	A
35625	HD 61421	07 34.0	+05° 28	G-24	1-N**	13/.5	13°F	03:10	03:18	B
35626	HD 76644	08 50.3	+48° 26'	G-24	1-N**	13/.5		03:25	04:12	C
35627	HD 91797	09h 22.6	-08° 45	"	"	13/.5	13°F	04:23	04:30	A
35628	HD 110379	12h 36.5	-01° 34	"	"	"		05:12	05:40	B
35628F1	calibration	step wedge	for plates	35620 - 35623				Jan 6/72		

Dome Temp. 08°F 65%

Focus

Dome Temp. 08°F 75%

Transparency Conditions clear clouds at 20:45
cleared up at 02:00

322

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
04h14E	+53° 50	5	3.61	B2V	10-10-10	cb Thesis	80/40		FINE
0h54E	+31° 03	4	~6.5	G2	10-10-10	SvdB XPer	400/180	exposed Box #1	St WEAK
0h50E	+48° 02	4	5.47	B8V	10-10-10	Cb thesis	200/100		FINE
01h05E	-01° 30		8.2	B8V	10-20	cb Thesis	80/60	clouded over	WEAK
					3-3 Neon	no filter			SC To BI
03h07W	+16° 34'	3	V-1.41 I-1.85	A0III	90-90-90	A 460Y	40/107	20 min OVER DEVELOP	FINE
02h16W	+05° 24'		V-0.35 I--0.31	F5III-IV	90-180	"	40/100	3 min PLEASE	? Fine ~~Stars~~
01h52W	+49° 15	3	V-3.15 I-2.16	A7II	90-90-90	"	80/201	45 min	WEAK
01h45W	-08° 25		V 1.96 I 0.05	K3III	120-120	"	40/4	4 min some cirrus Box #2	? Weak ~~Stars~~
0h10E	-01° 11		V-2.28 I-2.25	F0I	90-90-90	"	80/39	clouds at 04:30 closed up	BLANK
MWP 2 / 9.0 mm at 68°F									

323

*baked Dec. 28/29/71

Date Jan. 6/7/72 Observer S/-Ri Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35629	X Per.	03 49 08	+30 45.1	G-12	IIa-O*	B/.5		22:29	23:40	A
35629 T1	adjusted tilt again, 4 mins clockwise									C
	Had adjusted the tilt wrong on Jan 5 OK now									

Dome Temp. 15° 78%

Transparency Conditions Haze thickening.

Focus

Dome Temp.

ing Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
40	A	02"35w	+31°05'	2"	6.0–6.6	Op	10-20	SvdB XPer.	400/60	3-5 mag Extinction after 15 min exposure.	Blank
							30				

325

Baked Dec 28-29

Date Fri-Sat Jan 7-8 1972 **Observer** Ri-Ro/Bln-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
35630	HD 12402	01 56.5	+27°56	G-12	IIaO B	13/.3	30°F	18.00	18.45	A
35631	HD 24534	03 49 08	+30° 45.1	G-12	IIaO	13/.5		20:13	20:47	B
35632	HD 20902	03 17m11s	+49° 30	G-12	IIaO	9/.5	29°F	20.55	21.02	C
35633	HD 25642	03 59m8s	+50° 05	G-12	IIaO	9/.5		21.13	21:45	A
35634	HD 48638	06 39.3	+27° 47	G-12	IIaO B	13/.3		21:55	22:55	B
35635	HD 56176	07 109	+26° 53	"	"	"		22:59	23:53	C
35636	HD 21364	03 21m45	+09° 23'	"	"	9/.5		00:02	00:07	A
35637	H 24912	03 52.5	+35 30	"	"	9/.5		00 15	00:21	B
35638	HD 28363	04 23.3	+15° 57'	"	"	9/.3		00 24	0:51	C
35639	HD 48454	06 38.4	+402	"	"	7/.5		01:58	02:56	A
35640	HD 37511	05 34.1	+31 18	"	"	13/.5		03:00	03:46	B
35641	HD 102325	12 15.3	+37 11	"	"	13/.3	30°F	03:58	04:58	C
35642	HD 141458	15 44.1	+13 01	"	"	13/.5		05:05	06:24	A

Dome Temp. 20°F 73%

Focus

Dome Temp. 06°F 70%

Transparency Conditions clear but high winds scattered clouds then clear up

ing Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
45	5:27E	+28° 22'	2	7.60	K1 III	10-10-10	S.S.U	800/175	clouds	Blank
47	04:16E	+31° 04	2	6.0-6.6 var.	Op	10-10-10	Sud B xPh	200/100		FINE
22	0°30W	+49° 50	3	1.79	F5Ib	15-15	G1001 Ro	20/13		FINE
45	0°30W	+50° 21		4.29	B9 I	10-10-10	" "	200/100	high wind trouble	FINE
55	1H05E	+27° 48	2	8.40	K3 III	10-10-10	S.S.U	800/300		FINE
53	0433E	+26° 50'		4.7	G7 III	10-10-10	"	800/300		FINE
37	03H31W	+09° 45	2-3	3.44	B8P	10-10-10	Spect Bri Bln	40/15		FINE
81	03H14W	+35° 50	2	4.04	O7	10-10-10	"	40/17		FINE
9	04H17W	+16° 14'	2-4	7.14	F8	10-10-10	"	400/160		FINE
55	05H04W	+04° 05	4	5.89	B0 III	10-10-10	Sp. Std.	200/100		FINE
16	04H58W	+31° 28	4	6.03	B7 V	10-10-10	Sp. Bin-Bln	400/200		FINE
53	04H30E	+26° 52	4	5.72	K2	10-10-10	"	400/200		FINE
52	02H32E	+13° 55'	4	6.80	A0	10-10-10	"	400/142		FINE

327

* baked Dec 28/29/71

Date Sat/Sun Jan 8/9/78 **Observer** S.L.G. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
35643	X Per	03 49 08	+30 45.1	G-12	IIa-O*	13/.5	18°F	18:38	19:55	A
	~~Star 2-56~~	~~02 47.5~~	~~+26 59~~	~~6 1/2~~	~~"~~	~~13/.5~~				
35643T1	calibration	step wedge	for plates	35631 - 35643						
Sun	Mon Jan 9-10 1972		clear but the telescope too wet to observe							

Dome Temp. 16°F H: 96%

Transparency Conditions fair - thin cirrus

328

Focus

Dome Temp.

...ng Time ...S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
...55		+31°03	2"	6.0 / 6.6	Op	10-10-10	Sy & R X Per.	400/200		FINE
	9 Jan 72 MWA 2/9 min @ 68°F									

329

* Behind Jan 9-10 1972

Date Mon Tues Jan 10-11 1971 **Observer** Hu Hd-Ki **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35644	HD 12402	01 56.5	+27° 56'	G-12	IIaO B*	13/.3	34°F	18:10	19:50	A

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

...ng Time ...S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
	00-00	+28°53	2	7.60	K III	10-10-10	S.S.V	800/162		

331

Baked Jan 9-10 72

Date Wed Jan 12 1972 **Observer** Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35645	HD 71093	08 20.4	+28° 14	G-12	IIa-O B*	13/.3	32°F	01 24	02 10	A
35646	HD 93009	10 18.2	+26° 04	G-12	IIa O B	13/.3		02 15	04 53	B
35647	HD 107325	12 15.3	+27° 11	G-12	IIa O B	13/.3	29°F	05 00	05 45	C
35648	HD 110411	12 36.8	+10° 47	G-12	IIa O B	13/.5		05 50	06 20	D
35649	HD 130109	14 41.2	+20° 19'	G-12	IIa O B	13/.5		06 25	06 45	E
35649 T1	Cal step wedge for plates 35645-49									

Dome Temp. 24°F 79%

Focus

Dome Temp. 20°F 82%

Transparency Conditions clear, scattered hazy towards dawn

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
00°51W	+28°05	3	7.40	K5III	10-10-10	S.S.U.	800/300		Strong
01°36W	+25° 50	3	8.33	K2III	10-10-10	S S U	800/300		"
01°31W	+26° 48	3		gK2	10-10-10	Bln Spect Bin	200/100		"
00°45W	+10 30	4	4.97	A1V	10-10-10	"	200/100		"
00°54E	-02° 07'	4	3.74	A0V	10-10-10	"	200/100		"
Jan 14/72		MWP-2/9mm				@ 68°F			

333

* baked Jan 9/10/72

Thurs – Fri

Date Jan 13/14 /72 **Observer** Hurkens-Tu **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35650	HD 67402	08 02.7	+27 47	G12	IIaO*	13/3	22	02:11	05 11	A
35651	HD 118905	13 34.8	+27 12	"	"	"		05:17	06 59	B

Dome Temp. 18° F H = 67%

Focus

Dome Temp. 11 H = 68%

Transparency Conditions Scattered Cirrus semi bad 3 3 4

very bad seeing

g Time S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
11 19	4 18W	-27 40	3"-6"	8.17	K0 III	10-10-10	SSV	800/300	cloud	Fine
59 1	20 35W	26 56	"	8.46	K1 III	10-10-10	"	800/175		Fine

335

* baked Jan 9/10/72

Date Jan 14-15/72 Fri-Sat **Observer** Tn - Pek **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35652	χ Per	03 49.1	+30 45	G12	IIaO*	13/5	28°F	17 47	18 17	A
35653	HD 218634	23 04.5	+8 08	"	"	"		18 23	19 11	B
35654	HD 38670	05 42.4	+20 50	"	"	"		22 24	23 10	A
35655	HD 45829	06 24.6	+7 59	"	"	"		23:15	01 55	B
35656	HD 74274 AB	08 41.5	+6 47	"	"	"	10°F	02 00	02 10	C
35657	HD 103483A	11 49.9	+47 02	"	"	"		02 25	03 35	A
35658	HD 183183B	"	"	"	"	"	5°F	03 39	05 05	B
35659	HD 112033	12 48.4	+21 48	"	"	"		05 09	05 39	C
35660	HD 189511	12 30.1	+18 56	"	"	"		05 43	06 21	A
35661	HD 126129	14 18.5	+8 54	"	"	"		06 27	06 41	C
35661 T1	Col stop wedge for plates 35650 → 35661									

Jan 15/16 McU-Tn Perfectly clear but constant snow + ice crystals
(gave up 03^h under good skies)

Dome Temp. 16°F H = 68%

Focus 2

Dome Temp. −3 65 Cold!!!

Transparency Conditions Excellent

Cloud by 19h
very windy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
02 20E	31° 04′	2-3	v: 6-6.6	Op	10-10-10	S.Vdg	400/200		Fine (guiding)
3 18W	8 38	"	6.58	K6I	10-10-10	Vis Bin	400/190	Vis. Bin, Water-Lou	Fine (guiding)
3 40W	20 59	1-8"	5.02	B9	10-10-10	Vis Bin, Wat	400/200		sl strong smudge*
4 46W	8 04	3-5"	6.8	K0Iab	10-10-10	Late Type	800/410		Fine
5 40W	16 38	5"	3.98	F8	15-10-5	Vis Bin	200/a120		Strong
1 00E	46 43	3-5"	6.46	[illegible]	10-10-10	"	800/375	No corrup.	Fine*
1 30W	"	"			10-10-10	"	800/390	B corrup.	Fine
2 06W	21 31	"	5.86	K0	10-10-10	"	400/300		Fine
2 16W	18 38	"	6.22	K2m	10-10-10	"	400/300		Fine
3 22E	18 42	"	5.15	A0V	10-10-10	"	200/100		Fine
Jan 15/72		mwp-2		for	9 min	@ 68°F			
								* Smudge marks	

337

* based Jan 9/10
** based Jan 16/17

Date Jan 17/18 1972 Mon Tues **Observer** Th. Hu Kein Hd/cb Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35662	HD 4550	00 42.4	+25 49	G12	IIaO*	13/3		17:58	19 24	A
35663	HD 23257	03 38.6	+27 37	"	IIaO**	"		19:33	20:47	B
35664	χ Per	03 49.1	+30 45	"	"	13/5	23°F	20:54	21 34	C
35665	HD 37756	05 37.1	+29 10	"	"	13/3	26°F	21 37	23 15	A
~~35666~~	~~HD 51418~~	~~06 52.2~~	~~+42 26~~	~~"~~	~~"~~	~~91/5~~	~~26°F~~	~~23 25~~		~~B~~
35666	HD 37473	05 33.4	−2° 39	"	IIaO**	13/5	27°F	00h:08	01:42	A
35667	HD 41753	06 01.9	+14 47	"	"	"		01:46	01:58	B
35668	HD 62044	07 34.04	+28 57.6	"				02:02	02:20	C
35669	HD 87504	10 00.3	−12 35	"	"	"	28°F	02:20	02:40	B
35670	HD 98664	11 16.0	+6 35	"	"	"		02:45	02:53	A
35671	HD 90009	10 18.2	+26 04	"	"	13/3		03:01	04:59	B
35672	HD 118905	13 34.8	+27 12	"	"	"		05:02	06:56	C
35672	T1	Calibration step wedge			for plates		35662 - 35672			

Dome Temp. 17°F H = 82%

Focus

Dome Temp. 23° H = 88%

Transparency Conditions Excellent

Some cloud by 18h cloud seeing windy

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
N 2h 05	26 15	2-5"	8.16	K0 III	10-8-8	SSV	800/220	thin cloud Clouds	Fine
32W	27 56	2-3"	7.60	G5V	10-9-10	"	800/250	windy	"
N 1 09	31 05	"	5.66	Op	10-10-10	"	400/164		Too strong
02 02W	29 18	3-4"	7.96	K1 III	10-10-10	SSV	800/260		Fine
		"	6.6	A0p	10-	Spec. G1	400		
03 38W	-02° 31	4-5"	6.3	B3V	10-9-9	Cb thesis	800/258	light cloud Overcast	Fine
03 22W	+4° 53	4-5"	4.05	B3 V	15-15	"	40/15	Veil	sl strong
02 02W	+29 03	3-4"	4.3	K1 III	15-15	"	40/24	12 min	Fine
02 02W	-12 47	5-6"	4.51	B8 V	10-10-10	"	200/35		strong
30 56E	+6 17	"	3.99	K4 V	15-15	"	40/16		strong
02 07W	+25 44	3-4"	2.33	K2 III	10-9-9	SSV	800/270	* nearest star too faint ??	Fine
00 44W	28 55	2-3	8.46	K1 III	7-8-10	"	800/210	very windy	Fine
Jan	19/72	12	min	NWP-2	@ 68°F				

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* bulged Jan 16/17/72

Thurs - Fri

Date Jan 20-21 / 72 **Observer** In - Hutchins **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35673	HD 90009	10 18.2	+26 09	G12	IIaD *	13/3		02 15	6 13	A

Dome Temp. 15°F 70%

Focus

Dome Temp. 10°F 72%

Transparency Conditions Excellent after 8:30

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
3 30 W	25 49	6cd	8.33	1-2E	10-15-10	55V	800/300		sc. wx

1 baked Jan 16/17/72

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Date Jan 21-22/72 Fri-Sat **Observer** Tn **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
35674	Algol	03 01.7	+40 34	612	DaO*	13/5	19°F	20 33	21:10	B
35675	"	"	"	"	"	"	20°F	21:18	22:02	C
35676	"	"	"	"	"	"	"	22:12	22:40	A
35676F1	Focus			"	"	13	"			F

Dome Temp. 19°F H=85%

Focus

Dome Temp. 19°F H=75%

Transparency Conditions Very cloudy?

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Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
01 48W	+40°57'	3"-10"	2.0	88 V	10-10-9	Radio Flare	200/84	80% between (21h->21:10)	sc STR
02 46W	"	2"-4"	"	"	9-7-9	"	200/75	very cloudy	sc STR
03 18W	"	"	"	"	9-9-9	"	200/90	"	coming sc STR
	~~no ~~	~~ foot ~~	~~and~~	~~73~~	~~no filter~~			no centre comp	

+ baked Jan 16/17/72

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Date Jan 25-26/72 Tue-Wed Observer Th Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35677	HD 107325	12 15.3	+27 1	G12	IIaO*	13.3	13°	01:18	02 56	A
35678	HD 110411	12 36.8	+10 47	"	"	13.5	"	03:05	03:29	B
35679	HD 130109	14 41.2	+2 19	"	"	"	"	03:34	03:40	C

Dome Temp. 9°F H=62%

Transparency Conditions some cloud very windy

Focus

Dome Temp.

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ng Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
2 5		0121E	26 53	bad		gk2	9-9-9	Spl.n-B/n	200/105	too windy, cloud also	FINE
22		0110E	10 29	3-4	4.97	A1V	9-9-9	"	200/90		SL.STR
40		0305E	+2 08	"	3.74	A0V	1374	"	40/16		SL.STR
		dw 90 mm @			68°F		mcwP.2		26 Jan/72		

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* baked Jan 25/26 1972
** sensitized 26-01-72

Date Wed 19 Jun Ja 26-27 18 **Observer** GM-R, Cuff R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35680	Stock 2-56	2^h 2.5	+58° 57	G43	Ha O*	13/.3	14°F	18:54	20:55	A
35681	HD 13854	2^h 9.9	+56 36	"	"	"	14°F	21:02	21:14	B
35682	NGC1502-59	3^h 59	+62 03	"	"	"	12°F	21:29	22:55	C
35683	NGC1502-B	"	"	"	"	"	12°F	23:04	23:24	A
35684	NGC1502-A	"	"	"	"	"	12°F	23:26	23:44	B
35685	HD 29587	4^h 34.5	+41° 57	"	"	"		23:50	00 23	C
F1				"	"	13/.5	12°F			B
35686	HD 47105	06 32.0	+16 29	G24	I-N**	13/.5		01:01	01:20	A
35687	HD 76644	08 52.3	28 26	"	"	"	"	01:32	02 [illegible]	B
35688	HD 81797	09 22.6	-08 45	"	"	"	12°F	02:35	02:45	C
35689	δ Crt BS 4382	1960 $11^h 17^s.3$	1950 -14° 34'	"	"	"		02 55	03 36	A
35690	HD 110379/80	12 36.5	-01 34	"	"	"		03.44	04:27	B
35691	HD 123657	14 02.6	43° 46	"	"	"	12°F	04 35	05 18	C
35692	HD 149256	16 35.0	21 27	"	"	"	"	05.26	06:23	A
35685 T1	calibration step wedge				IIa0b		flat	35680 - 35685		

Dome Temp. 100F 64%

Focus

Dome Temp. 8°F 75%

Transparency Conditions excellent

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Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
03:47W	+59 21	3	8.9	(B)	3-3-3	GH cl.	800/100		FINE
03:04W	+57 03	2	6.2	B1	3-3-3	B cl	400/50		SL. STR
02:55W	+62 21	2	9.1	(F)	3-3-3	GH cl	800/120		(GUIDING) FINE
03:03W	+62 21		7.4	(B)	3-3-3	"	400/50		SL. STR
03:43W	+62 21		7.4	(B)	3-3-3	"	400/50	exposed II	SL. STR
[illegible]	+42 11		7.7	G2	3-3-3	sdd cl	40/50		FINE
10/[illegible]	[illegible]								NO CENTRE COMP.
02:45W	+16° 34'	3	V-I 0.03 I 1.32	A0 V	NF on 90-90-90	A 410Y	40/324	exposed 15m	FINE
	+49° 14'		V-I 0.39 I 2.90	A7 V	90-90 -90	"	40/465	exp 45m exposed II 2	SL. WK
[illegible]	-8° 35		V-I [illegible] I 2.85	K3 III	120-120	"	40/47	exp 5m. plate holder opened (50 m) (GUIDING)	FINE
[illegible]	-14° 30	2	V-I 1.43 I-2.13	G8 III-IV	90-90 90	"	40/78	exp 35m	FINE
[illegible]	-01° 10'	2	V-I 0.64 I 2.27	K0 I	90-90 90		40/230	exp 40m	FINE
[illegible]	+41° 05	2	V-I 1.51 I 1.76	M4-4.5 III	90-90 90		80/66	exp 35m	STRONG
[illegible]	+21° 39	2	[illegible] I [illegible]	G5 III	90-90 90		40/414		VERY STRONG
	plate no 35696		-35692	div.	2.14/5 min @ 6	8°F	27 jan/72		
div.	[illegible] 2/90		min	@ 6	8°F	27 jan/72			

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Baked Jan 25/26

Date Fri Sat ~~Feb~~ Jan 28-29 1972 **Observer** Ri- Ed Waterloo **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35693	HD 19356	03 01.7	+40 34	G-12	IIaO	9/.5	20°F	18:28	18:32	A
35694	HD 23257	03 38.6	+27 37	G-12	IIaOB	13/.3		18.40	19 46	B
35695	BD+47 781	03 6.4	47° 43'	G-12	IIaOB	13/.3		19:52	21:30	C
35696	HD 40873	05 56.6	+51° 34	G-12	IIaOB⁺	13/.5		22:15	22:57	A
35697	HD 71663A	08 23.5	-02 11	G-12	IIaOB⁺	13/.5	16°F	23:05	00:00	B
35698	HD 87822	10 02.5	+32° 06	G-12	IIaOB	13/.5		01:22	02 13	C
35699	HD 101177	11 33.5	+45° 40	G-12	IIaOB⁺	13/.5		02:20	02:56	A
35700	HD 106690	12 11.1	+41 13	G-12	IIaOB⁺	13/.5	16°F	03:03	04:23	B
35701	HD 145931	16 08.5	+42 39	G-12	IIaOB⁺	13/.5		04:30	05:55	C
35702	HD 139195	15 31.7	+10 21	G-12	IIaOB	13/.5	16°F	06:00	06:47	A

Dome Temp. 120°F 77%

Focus

Dome Temp. 8°F 78%

Transparency Conditions clear clouds clear clouds clear

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ng Time S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
32	A	0h27E	+40°55'	2	2.2-3.47	B8 V	15-15	Algol	40/20		(GUIDING) FINE
46	9	3h15W	+27°55'		7.60	G5 I	10-10-10	SSU	800/300		FINE
30	8	0h30W	+48°05	3	8.5	G-5	10-20	Wetherby	800/114	clouds at 8:10 over Dunlap plane	SL. WK
57	1	3h00E	+51°40'	3	6.44	A5	10-10-10	Visual Bin	400/200		FINE
00	1	20h16E	-02°20	3-4	6.57	F0	10-20	"	400/104	clouds	V. SL. WK
5	2	[illegible]	-31°50'	"	6.60	F5	10-10-10	"	400/200	cleared off again setting in again	FINE
50	1	[illegible]26E	-45°20'		6.90	G0	10-10-10	"	400/200	expired Box #1	FINE
[illegible]	1	[illegible]	-40°53		7.36	M1 III	10-10-5	"	400/400		FINE
15	2	3h[illegible]E	+43°30'	3	7.38	K4 III	10-10-10	"	400/320		V. SL. WK
47	10	20h35E	+10°10'		5.4	K1 p	10-10-	Late Type	200/150		FINE

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* bad ad Jan 25/26

** bad by Jan 29

Date Sat-Sun Jan 29/30 **Observer** GH-Ri / McU-Ri **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35703	HD 19356	3^h 01.7	+40° 34	612	IIaOB	9/.5	16°F	19:33	19:36	A
	~~NGC 1502 59~~	~~3h 59~~	~~+62° 03~~	~~G43~~	~~IIaO~~	~~1.5~~				
35704	HD 56176	07 10.9	+26 53	G12	IIaOB	13.3	16°F	00:15	01 06	B
35705	HD 67402	08 02.7	+27 47	"	"	"		01 09	02:16	C
35706	HD 90009	10 18.2	+26 04	"	"	"	15°F	02 19	03:32	A
35707	HD 102646	11 44.0	+28 41	"	"	"	14°F	03 42	04 24	D

Dome Temp. 10°/72%

Focus

Dome Temp. 7°/81%

Transparency Conditions Some cloud general hazy after 00.00

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
[illegible]	+40° 57	2"	2.2 [illegible]	B2 V	15-15	Algol	40/20		STRONG
								clouds!	
[illegible]	+26° 50'	3	4.70	G [illegible]	10-10-10	S.S.U	800/300	exposed Box 3	V. SL. WK
[illegible]	+27° 40'		5.17	K2 [illegible]	10-10-10	SSV	800/300		SL. WK
[illegible]	+25 47	2	5.33	K2 [illegible]	10-10-10	SS✓	800/300		SL. WK
[illegible]	+28 21		5.55	K0 [illegible]	10-20	SS✓	300/86	clouds [illegible]	(SL) WK

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* Baked Jan 28-~~27~~ 1972

Date Ja 30-31 1972 Sun Mon **Observer** GH-RL/R. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.
35708 (1)	Stoke 2-56	2^h 7.5	+56° 57	G-43	IIa0B*	13/3	18°F	18^h 22	19^h 36	A
35709 (1)	Stoke 2-53	2^h 7	+53° 17	"	"	"	16°F	19^h 50	21^h 28	B
35710 (1)	HD 13554	2^h 9.9	+56° 36	"	"	"		21^h 33	21:52	C
35710 F1				"	"	"		~~23:40~~		B
35711	HD 67402	08 02.7	+27 47	G-10	IIa0B*	13/3		23:40	00:45	A
35712	HD 86778	09 55.6	+29° 16	G-10	IIa0B*	13/3		00:53	01:50	B
35713	HD 100179	11 26.6	+24 52	G-12	IIaOB*	13/3	13°F	01:58	03:20	C
35714	HD 102646	11 44.0	+28 41	G-12	IIa0B*	13/3		03:30	04:58	A
35715	HD 119905	13 34.0	+27 12	G-12	IIa0B*	13/3	12°F	05:05	06:25	B

Dome Temp. 11°F / 74%

Focus

Dome Temp. 5°F / 85%

Transparency Conditions Excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	Program	Exp. Mtr.	REMARKS	Quality
1h 33m	+59° 49'	2'	8.9	(B)	10-10	GH cl.	800/100	Number 35708 exposed Box #3 Number 35708	FINE
[illegible]	+58° 40'	11	8.9	(B)	3-3-3	"	800/100		
3h 53m	+57° 02	3	6.2	B/5g	3-3-3	std vel	800/41		FINE
	10 40								CENTRE w VIOLET
[illegible]	127° 40'	2	8.17	K0III	10-10-10	S.S. V	800/300		FINE
[illegible]	[illegible]	2	8.7	K2III	10-10-10	S S V	800/300		U. SL WK
[illegible]	+24° 34'	2	9.02	K4III	10-10-10	S S V	800/300		U. SL. WK
[illegible]	+23 20'	3	8.55	K0III	10-10-10	S.S. V	800/300		SL. WK
[illegible]	+26° 54'	3	8.46	K1III	10-10-10	S S U	800/300		SL WK

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Date ..... **Observer** ..... **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	PL

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nding Time
E.S.T.

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